



INTERNATIONAL  
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# CERTIFICATE OF ACCREDITATION

*This is to attest*

## **ARAB CENTER FOR ENGINEERING STUDIES ACES-DOHA**

INDUSTRIAL AREA, ZONE 57, STREET NO. 41, GATE NO 471, P.O. BOX 19579  
DOHA, QATAR

### **Testing Laboratory TL-343**

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 June 12, 2024



*International Accreditation Service*  
Issued under the authority of IAS management

Visit [www.iasonline.org](http://www.iasonline.org) for current accreditation information.

# SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 101, Brea, California 92821, U.S.A. | [www.iasonline.org](http://www.iasonline.org)

## ARAB CENTER FOR ENGINEERING STUDIES ACES-DOHA

[www.aces-int.com](http://www.aces-int.com)

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**Contact Phone** +974-44870161

*Accredited to ISO/IEC 17025:2017*

*Effective Date June 12, 2024*

Aggregate	
AASHTO T84	Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate
AASHTO T85	Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate
ASHTO T96	Standard Test Method for (Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine)
AASHTO T104	Soundness of Aggregates by Use of Magnesium Sulfate
AASHTO T112	Standard Test Method for Clay Lumps and Friable Particles in Aggregates (Clay Lumps and Friable Particles in Aggregates)
AASHTO T176	Standard Test Method for (Sand Equivalent Value of Soils and Fine Aggregate)
AASHTO T304 Method A	Standard Test Methods for (Uncompacted Void Content of Fine Aggregate (as Influenced by Particle Shape, Surface Texture, and Grading))
ASTM C88	Soundness of Aggregates by Use of Magnesium Sulfate
ASTM C117	Standard Test Method for (Material Finer Than 75- $\mu$ m (No. 200) Sieve in Mineral Aggregate by Washing)
ASTM C123/C123M	Lightweight particles in Aggregate
ASTM C127	Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate
ASTM C128	Standard Test Method for Density, 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	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates (Particle Size Distribution)
ASTM C142/ C142M	Standard Test Method for Clay Lumps and Friable Particles in Aggregates (Clay Lumps and Friable Particles in Aggregates)
ASTM C535	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/C702M	Standard Practice for Reducing Samples of Aggregate to Testing Size

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ASTM C1252	Standard Test Methods for (Uncompacted Void Content of Fine Aggregate (as Influenced by Particle Shape, Surface Texture, and Grading))
ASTM D75/D75M	Standard Practice for Sampling Aggregates
ASTM D2419	Standard Test Method for (Sand Equivalent Value of Soils and Fine Aggregate)
ASTM D4791	Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D5444	Standard Test Method for Mechanical Size Analysis of Extracted Aggregate
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
BS 812-2 CL 5.3	Particle Density and Water Absorption (All Larger than 10mm Aggregate)
BS 812-2 CL 5.4	Particle Density and Water Absorption (5-40mm Aggregate)
BS 812-2 CL 5.5	Particle Density and Water Absorption (10mm Aggregate and Smaller)
BS 812-102	Sampling of Aggregate
BS 812-103.1-7.2	Particle Size Distribution (Wet)
BS 812-103.1-7.3	Particle Size Distribution (Dry)
BS 812-105.1	Method Of Determination of Particle Shape (Flakiness Index)
BS 812-105.2	Method Of Determination of Particle Shape (Elongation Index)
BS 812-109 CL 6	Testing aggregates - Methods for determination of moisture content (Oven Drying)
BS 812-110	Testing aggregates (Methods Determination of Aggregate Crushing Value)
BS 812-111	Determination of Ten Percent Value
BS 812-112	Determination of Aggregate Impact Value
BS EN 932-1	Tests for general properties of aggregates. (Methods for sampling)
BS EN 932-2	Tests for general properties of aggregates. (Methods for reducing laboratory samples)
BS EN 933-1	Tests for geometrical properties of aggregates - Determination of particle size distribution — Sieving method (Particle Size Distribution)
BS EN 933-1	Tests for geometrical properties of aggregates - Determination of particle size distribution — Sieving method (Material Finer than 0.075mm)
BS EN 933-1 CL A.4.4	Tests for geometrical properties of aggregates - Determination of particle size distribution — Sieving method (Material Finer than 0.063mm)
BS EN 933-3	Determination of particle shape — Flakiness index
BS EN 933-4	Tests for geometrical properties of aggregates Determination of particle shape. Shape index
BS EN 933-7	Determination of shell content. Percentage of shells in coarse aggregates
BS EN 933-8	Assessment of fines — Sand equivalent test
BS EN 1097-1 (QCS 2014 Section 29)	Determination of the resistance to wear (micro- Deval)
BS EN 1097-2 CL 5	Tests for mechanical and physical properties of aggregates (Determination of resistance to fragmentation by the Los Angeles test method)

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BS EN 1097-3	Tests for mechanical and physical properties of aggregates (Determination of loose bulk density and voids)
BS EN 1097-6	Determination of particle density and water absorption of Aggregate
BS EN 1367-2	Tests for thermal and weathering properties of aggregates. (Magnesium sulphate test)
BS EN 1367-4	Tests for thermal and weathering properties of aggregates (Determination of Drying shrinkage)
BS EN 12697-2	Determination of Particle Size Distribution
<b>Asphalt</b>	
AASHTO PP60	Standard Test Method for Preparation and Determination of the Relative Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO PP61	Developing Dynamic Modulus Master Curves Using AMPT
AASHTO R30	Mixture Conditioning of Hot-Mix Asphalt (HMA),
AASHTO R47	Practice for Reducing Samples of Hot Mix Asphalt (HMA) to Testing Size.
AASHTO R83L	Preparation of Cylindrical Performance Test Specimens Using the Superpave Gyratory Compactor (SGC)
AASHTO T114-18 (2019)	Provisional Standard Method of Test for Determining the Interlayer Shear Strength (ISS) of Asphalt Pavement Layers
AASHTO T166 - Method A	Bulk Specific Gravity ( ) of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface-Dry Specimens
AASHTO T209 - Method A	Standard Method of Test for Theoretical Maximum Specific Gravity (Gmm ) and Density of Hot Mix Asphalt (HMA) Maximum Specific Gravity (Gmm)
AASHTO T283	Resistance of compacted hot mix asphalt (HMA) to moisture - induced damage.
AASHTO T312	Test for Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T324	Humblot hamburg wheel tracker test
AASHTO TP79	Dynamic Modulus and Flow Number for Hot Mix Asphalt (HMA)
ASTM D546	Standard Test Method for Sieve Analysis of Mineral Filler for Bituminous Paving Mixtures
ASTM D979/D979M	Standard Practice for Sampling Bituminous Paving Mixtures
ASTM D1188	Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples
ASTM D2041/D2041M	Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D2172	Quantitative Extraction of bitumen from bituminous paving mixtures
ASTM D2726/D2726M	Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D3203/D3203M	Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D3549/D3549M	Thickness of Asphalt Specimen

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ASTM D4867/D4867M	Resistance of compacted hot mix asphalt (HMA) to moisture - induced damage.
ASTM D5361/D5361M	Standard Practice for Sampling Compacted Bituminous Mixtures for Laboratory Testing
ASTM D5581	Resistance to Plastic Flow Using Marshall Apparatus (6 in. Specimen)
ASTM D6307	Standard Test Method for Asphalt Content of Hot-Mix Asphalt by Ignition Method
ASTM D6752/D6752M	Bulk Specific gravity of Compacted Bituminous samples
ASTM D6857/D6857M	Maximum Specific Gravity and Density of Bituminous Paving Mixtures Using Automatic Vacuum Sealing Method
ASTM D6925	Test for Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
ASTM D6926	Standard Practice for Preparation of Bituminous Specimens Using Marshall Apparatus
ASTM D6927	Standard Test Method for Marshall Stability and Flow of Bituminous Mixtures
ASTM D6931	Standard Test Method for Indirect Tensile (IDT) Strength of Bituminous Mixtures
ASTM D7227/ D7227	Rapid Drying of Compacted Asphalt Specimens Using Vacuum Drying Apparatus.
ASTM E965	Measuring Pavement Macrotexture Depth Using a Volumetric Technique
BS EN 12697-1 Annex B.1.5	Bituminous mixtures — Test methods for hot mix asphalt (Soluble Binder Content)
BS EN 12697-5 Proc. B	Bituminous mixtures -Test methods for hot mix asphalt Determination of Maximum Density (Hydrostatic procedure)
BS EN 12697-6	Bituminous mixtures — Test methods for hot mix asphalt (Determination of Bulk Density of Bituminous Material)
BS EN 12697-13	Temperature measurement
BS EN 12697-23	Determination of the indirect tensile strength of bituminous specimens
BS EN 12697-28	Preparation of Samples for Determining Binder Content, Water Content & Grading
BS EN 12697-29	Bituminous mixtures — Test methods for hot mix asphalt (Determination of dimensions of Bituminous Specimens)
BS EN 12697-35	Bituminous mixtures -Test methods for hot mix asphalt (Laboratory Mixing)
BS EN 12697-39	Binder Content by Ignition
QCS 2014 CL 06-05 Paragraph 16	Retained Stability (Per ASTM D6927 or ASTM D5581)
SP-2 & AASHTO R35	Standard Practice for Superpave Volumetric Design for Asphalt Mixtures (Superpave Mix Design)
<b>Building Acoustics</b>	
BS EN ISO 140-3	Laboratory measurement of airborne sound insulation of building elements
BS EN ISO 140-4	Field measurements of airborne sound insulation between rooms
<b>Cementitious Materials</b>	

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ASTM C109/C109M	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
ASTM C151/C151M	Autoclave Expansion of Hydraulic Cement
ASTM C183/C183M	Sampling and the Amount of Testing of Hydraulic Cement
ASTM C185	Standard Test Method for Air Content of Hydraulic Cement Mortar
ASTM C187	Standard Test Method for Amount of Water Required for Normal Consistency of Hydraulic Cement Paste
ASTM C188	Standard Test Method for Density of Hydraulic Cement
ASTM C191	Time of Setting of Hydraulic Cement by Vicat Needle
ASTM C204 Method A	Standard Test Methods for Fineness of Hydraulic Cement by Air-Permeability Apparatus
ASTM C311/C311M CL 11-13	Standard Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete (Moisture Content)
ASTM C311/C311M CL 19	Standard Test Method for Density of Hydraulic Cement
ASTM C311/C311M CL 20	Standard Test Method for Fineness of Hydraulic Cement by the 45- $\mu$ m (No. 325) Sieve
ASTM C311/C311M CL 29	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
ASTM C311/C311M CL 34	Standard Test Method for Length Change of Hydraulic-Cement Mortars Exposed to a Sulfate Solution
ASTM C349	Compressive Strength of Hydraulic-Cement Mortars (Using Portions of Prisms Broken in Flexure)
ASTM C430	Standard Test Method for Fineness of Hydraulic Cement by the 45- $\mu$ m (No. 325) Sieve
ASTM C989-Appendix XI	Compressive Strength for ground Granulated Blast Furnace slag
ASTM C1012/C1012M	Standard Test Method for Length Change of Hydraulic-Cement Mortars Exposed to a Sulfate Solution
ASTM C1240-15	Pozzolanic Activity Test
ASTM C1437	Standard Test Method for Flow of Hydraulic Cement Mortar
ASTM D5759	Characterization of fly ash for potential uses
BS 1924-2 CL 2.1.5	Stabilized materials for civil engineering purposes Part 2: Methods of test for cement-stabilized and lime- stabilized materials 'Method using vibratory compaction'
BS 1924-2 CL 4.2 & 4.3	Stabilized materials for civil engineering purposes Part 2: Methods of test for cement-stabilized and lime- stabilized materials 'Determination of the compressive strength of cubic specimens'
BS EN 196-1	Methods of testing cement (Determination of Strength)
BS EN 196-3:2005 + A1 CL 6 and Annex A	Methods of testing cement, Determination of setting times and soundness (Determination of Setting Time of cement)
BS EN 196-3 CL 7	Determination of Soundness of cement
BS EN 196-6	Determination of Fineness of cement
BS EN 196-7	Taking and Preparing Samples of Cement

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<b>Chemistry (Soil, Aggregate, Concrete, Cement)</b>	
ASTM C40/C40M	Standard Test Method for Organic Impurities in Fine Aggregates for Concrete
ASTM C289	Standard Test Method for Potential Alkali-Silica Reactivity of Aggregates (Chemical Method)
ASTM C494/494 CL 18.2-16	Standard Specification for Chemical Admixtures for Concrete (Oven Dry Residue of Admixture)
ASTM C494/494 CL 18.4-16	Standard Specification for Chemical Admixtures for Concrete (Specific gravity of Admixture)
ASTM C1152	Acid Soluble Chloride in Concrete
ASTM C1218	Water Soluble Chloride in Concrete
BS 812-117	Determination of Water
BS 812-117 App. C	Determination of Chloride Content (Acid Extract)
BS 812-118	Determination of Sulphate Content
BS 1377-3 CL 4	Determination of the organic matter content
BS 1377-3 CL 7.3	Methods of test for Soils for civil engineering purposes — Chemical and electro- chemical tests (Determination of sulphate content of soil- Water Soluble Extract)
BS 1377-3 CL 7.9	Determination of sulphate content of soil- Acid Soluble Extract
BS 1377-3 CL 8	Methods of test for Soils for civil engineering purposes — Chemical and electro-chemical tests (Determination of the carbonate content)
BS 1377-3 CL 9	Methods of test for Soils for civil engineering purposes — Chemical and electro- chemical tests (Determination of the pH value)
BS 1377-3 CL 9.2	Methods of test for Soils for civil engineering purposes — Chemical and electro- chemical tests (Determination of water- soluble chloride content)
BS 1377-3 CL 9.3	Methods of test for Soils for civil engineering purposes — Chemical and electro- chemical tests (Determination of acid- soluble chloride content)
BS 1881-124 CL 10.2	Determination of chloride content
BS 1881-124 CL 10.3	Determination of sulphate content
BS EN 196-2	Chemical analysis for cement
BS EN 196-2 CL 4.4.1	Determination of loss on ignition
BS EN 196-2 CL 4.4.2	Method of testing cement Chemical analysis of cement (Determination of sulfate)
BS EN 196-2 CL 4.4.3	Method of testing cement Chemical analysis of cement (Determination of residue insoluble in hydrochloric acid and sodium carbonate)
BS EN 196-2 CL 4.5.5	Decomposition with hydrochloric acid and ammonium chloride and precipitation of silica (alternative method)
BS EN 196-2 CL 4.5.6	Determination of pure silica
BS EN 196-2 CL 4.5.10	Method of testing cement Chemical analysis of cement (Determination of Ferric Oxide Content)
BS EN 196-2 CL 4.5.11	Method of testing cement Chemical analysis of cement (Determination of Aluminum Oxide Content)
BS EN 196-2 CL 4.5.14	Determination of calcium oxide by EDTA (alternative method)

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BS EN 196-2 CL 4.5.15	Determination of magnesium oxide by EDTA (alternative method)
BS EN 196-2 CL 4.5.16	Method of testing cement Chemical analysis of cement (Chloride Content)
BS EN 196-2 CL 4.5.19	Method of testing cement. Chemical analysis of cement (Alkalies Content)
BS EN 196-2-CL 13.2&3	Impure Silica Content
BS EN 196-2 CL 13.9	Total Silica Content
BS EN 933-9+A1	Tests for geometrical properties of aggregates- Assessment of fines- Methylene blue test
BS EN 1744-1 CL 12+A1	Determination of acid soluble sulphates
BS EN 1744-5	Tests for chemical properties of aggregates (Determination of acid soluble chloride content)
<b>Concrete</b>	
ASTM C31/C31M	Making and Curing of Concrete Tests Specimen
ASTM C39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
ASTM C42	Obtaining and Testing of Drilled Cores and Sawed Beams
ASTM C138/C138M	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C143/C143M	Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM C172/C172M	Standard Practice for Sampling Freshly Mixed Concrete (Sampling of Fresh Concrete)
ASTM C192/C192M	Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory
ASTM C231/C231M	Standard Test Method for Air Content Test for Fresh Concrete by Pressure Method, (Type B)
ASTM C232/C232M	Standard Test Methods for Bleeding of Concrete
ASTM C617/C617M	Capping of Concrete Cylindrical Specimen
ASTM C1064/C1064M	Test for Temperature of Fresh Concrete
ASTM C1202	Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration (Resistance to Chloride Ion Penetration (RCP))
ASTM C1231/C1231M	Standard Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
ASTM C1385/C1385M	Sampling of Shotcrete
ASTM C1604/C1604M-	Standard Test Method for Obtaining and Testing Drilled Cores of Shotcrete
ASTM C1611/C1611M	Slump Flow of Self- Consolidating Concrete
ASTM C1621/C1621M	Standard Test Method for Passing Ability of Self- Consolidating Concrete by J- Ring
ASTM C1688/C1688M	Density Determination of Pervious Concrete
ASTM C1701/C1701M	Infiltration Test for In place Pervious Concrete
BS 1881-122	Method of Determination of Water Absorption
BS 1881-208	Initial Surface Absorption (ISAT)
BS EN 12350-1	Testing fresh concrete (Sampling of Fresh Concrete)

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BS EN 12350-2	Testing fresh concrete (Slump Test of Fresh Concrete)
BS EN 12350-3	Testing fresh concrete (Vebe test)
BS EN 12350-4	Testing fresh concrete (Degree of compatibility)
BS EN 12350-5	Testing fresh concrete (Flow Table Test)
BS EN 12350-6	Testing fresh concrete (Testing fresh concrete Density)
BS EN 12350-7	Testing fresh concrete (Testing fresh concrete Air content. Pressure methods)
BS EN 12350-8	Slump Flow Test for self compacted Concrete
EN 12350-9	V-Funnel Test for self Compaction Concrete
BS EN 12350-10	L- Box Shap Test for Self Compaction Concrete
BS EN 12350-11	Sieve Segregation test for Self Compaction Concrete
BS EN 12390-1	Shape and Dimensions of Specimen
BS EN 12390-2	Making and Curing of Specimen for Strength Test
BS EN 12390-3 Annex B	Compressive Strength of Test Specimens
BS EN 12390-5 Annex A	Testing hardened concrete (Flexural strength of test specimens)
BS EN 12390-6	Testing hardened concrete (Tensile splitting strength of test specimens)
BS EN 12390-7	Density of Hardened Concrete
BS EN 12390-8	Water Penetration Test
EN 12504-1 (E)	Obtaining and Testing of Drilled Cores
DIN 1048-5	Method of determination of Water Penetration
EN 14636-2:2009 Annex C	Plastics piping systems for non-pressure drainage and sewerage — Polyester resin concrete (PRC), Part 2: Manholes and inspection Chambers, Annex C - Test method for the determination of the vertical crushing strength of slabs or tapers
EN 14636-2:2009 Annex F	Plastics piping systems for non-pressure drainage and sewerage — Polyester resin concrete (PRC), Part 2: Manholes and inspection Chambers, Annex F - Method for the assessment of the leak-tightness of a manhole or inspection chamber and its joints under short term exposure to internal water pressure and negative pressure
EN 14636-2:2009 Annex G	Plastics piping systems for non-pressure drainage and sewerage — Polyester resin concrete (PRC), Part 2: Manholes and inspection Chambers, Annex G - Test method for the determination of the long-term crushing strength (50 years evaluation point) of a chamber ring or a shaft ring, including the effects of media attack
NT Build 492	Chloride Migration Coefficient / Chloride Penetration Test
QCS2014 CL5-6	Concrete Temperature Monitoring by using Thermocouples
<b>Cosmetics</b>	
ACES in-house method (Chloroform Extraction).	Determination of paraphenylenediamine in cosmetics products
ACES In-house Method SOP63	Determination of formaldehyde in cosmetics by acetyl acetone method
ACES In-house Method SOP60	Determination of 1,4-Dioxane in cosmetics by headspace Gas Chromatography/Mass Spectrometry (GC/MS)



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AOAC Official Method 951.04	Chlorides in Deodorants Gravimetric Method
AOAC Official Method 951.05	Sulfates in Deodorants Gravimetric Method
<b>Dimension Stone</b>	
ASTM C97/C97M	Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone
ASTM C99/C99M	Standard Test Method for Modulus of Rupture of Dimension Stone
ASTM C170/C170M	Compressive Strength of Dimension Stone
ASTM C880/C880M	Standard Test Method for Flexural Strength of Dimension Stone
ASTM C1353/ C1353M	Standard Test Method for Abrasion Resistance of Dimension Stone Subjected to Foot Traffic Using a Rotary Platform, Double- Head Abraser
ASTM D4060	Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
BS EN 1926: Annex A	Natural stone test methods (Determining the compressive strength of stones)
BS EN 14157 Method A	Natural stones — Determination of (Abrasion Resistance)
EN 1341 CL 4.5	Natural stones — Determination of (Abrasion Resistance)
QCS 2014 CL 6 & CL 13.3.4	Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
<b>Electrical Safety</b>	
BS EN 60335-2-23	Household and similar electrical appliances Safety-Particular requirements for appliances for skin or hair care (Clause 7 and 28 only)
BS EN 60335-2-80	Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for fans (Clause 7 and 28 only)
<b>Environmental Chemistry - Water - Wastewater and Soil</b>	
APHA/AWWA 23rd Ed., 2120C	Spectrophotometric— Single-Wavelength Method (PROPOSED) (Color)
APHA/AWWA 23rd Ed., 2130 B	Nephelometric Method (Turbidity)
APHA/AWWA 23rd Ed., 2320 B	Alkalinity by Titration Method
APHA/AWWA 23rd Ed., 2320 B	Titration Method (Bicarbonate)
APHA/AWWA 23rd Ed., 2320 B	Titration Method (Carbonate)
APHA/AWWA 23rd Ed., 2320 B	Titration Method (Phenolphthalein Alkalinity)
APHA/AWWA 23rd Ed., 2340 C	Hardness by EDTA Titrimetric Method
APHA/AWWA 23rd Ed., 2510 B	Conductivity by Laboratory Method
APHA/AWWA 23rd Ed., 2520B	Electrical Conductivity Method (salinity)

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APHA/AWWA 23rd Ed., 2540-B	Total Solids Dried at 103– 105°C (Total Solids)
APHA/AWWA 23rd Ed., 2540 C	Total Dissolved Solids Dried at 180 oC (TDS)
APHA/AWWA 23rd Ed., 2540- C&E	Total Volatile Dissolved Solids (TVDS)
APHA/AWWA 23rd Ed., 2540-D	Total Suspended Solids Dried at 103–105°C (Total Suspended Solids (TSS))
APHA/AWWA 23rd Ed., 2540-D&E	Total Volatile Suspended Solids (TVSS)
APHA/AWWA 22nd Ed. 2540-F	Settleable Solids
APHA/AWWA, SM, 22nd Ed., 2540-G	Sludge Weight
APHA/AWWA, SM, 22nd Ed., 2710-D	Sludge Volume
APHA/AWWA, SM, 22nd Ed., 2710-D	Sludge Volume Index
APHA/AWWA, 23rd Ed. 3120-B	Antimony
APHA/AWWA, 23rd Ed., 3120-B	Arsenic
APHA/AWWA, 23rd Ed., 3120-B	Beryllium
APHA/AWWA 23rd Ed., 3120- B	Calcium
APHA/AWWA 23rd Ed., 3120-B	Chromium(VI)
APHA/AWWA 23rd Ed., 3120- B	Magnesium
APHA/AWWA 23rd Ed. 3120-B	Molybdenum
APHA/AWWA 23rd Ed., 3120-B	Phosphorous
APHA/AWWA 23rd Ed., 3120- B	Potassium
APHA/AWWA 23rd Ed., 3120-B	Selenium
APHA/AWWA 23rd Ed., 3120-B	Silicon
APHA/AWWA 23rd Ed., 3120- B	Sodium
APHA/AWWA 23rd Ed., 3120-B	Sulfur

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APHA/AWWA 23rd Ed., 3120-B	Titanium
APHA/AWWA 23rd Ed. 3120-B	Vanadium
AAPHA/AWWA 23rd Ed., 3120-B Heavy Metal Analysis by ICP, 3110-B Heavy Metal	ICP Heavy Metal Concentrations: Aluminum (Al), Barium (Ba), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Chromium (Cr), Cobalt (Co), Copper (Cu), Gallium (Ga), Indium (I), Iron (Fe), Lead (Pb), Lithium (Li), Magnesium (Mg), Manganese (Mn), Nickel (Ni), Potassium, Silver (Ag) Thallium (Ti) Zinc (Zn)
APHA/AWWA 23rd Ed., 3500-Ca-B	EDTA Titrimetric Method (Calcium)
APHA/AWWA 22nd Ed. 3500-Cr B,	Chromium (VI)
APHA/AWWA 23rd Ed., 3500-Mg-B	Magnesium Concentration by Calculation
APHA/AWWA 23rd Ed., 4110-B & P	Determination of Sulphate SO <sub>4</sub> , Bromide Br, Nitrate NO <sub>3</sub> , Nitrite NO <sub>2</sub> , Fluoride F, Chloride, Phosphate
APHA/AWWA 23rd Ed., 4110-B & D,	Bromate
APHA/AWWA 23rd Ed., 4110-B & D	Chlorate, Chlorite
APHA/AWWA 23rd Ed., 4500-B & C	Phosphorous (Total)
APHA/AWWA 23rd Ed., 4500-Cl B	(Chloride by Argentometric Method)
APHA/AWWA 23rd Ed., 4500-Cl G	DPD Colorimetric Method (Total Chlorine)
APHA/AWWA 23rd Ed., 4500-Cl G	DPD Colorimetric Method (Residual Chlorine)
APHA/AWWA 23rd Ed., 4500-CN C&F	Cyanide
APHA/AWWA 23rd Ed., 4500 H+ B	pH VALUE
APHA/AWWA 23rd Ed., 4500 NH <sub>3</sub> B & C	Ammonia Nitrogen
APHA/AWWA 23rd Ed., 4500-NO <sub>2</sub> B	Colorimetric Method (Nitrite Nitrogen)
APHA/AWWA 23rd Ed., 4500-NO <sub>3</sub> E	Cadmium Reduction Method (Nitrate Nitrogen)
APHA/AWWA 23rd Ed., 4500 Norg C	Semi-Micro-Kjeldahl Method (Total Kjeldahl Nitrogen)
APHA/AWWA 23rd Ed., 4500 Norg C	Semi-Micro-Kjeldahl Method (Total Organic Nitrogen)
APHA/AWWA 22nd Ed. 4500-O G	Dissolved Oxygen

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APHA/AWWA 23rd Ed., 4500 P B, C	Acid Colorimetric Method (Phosphate)
APHA/AWWA 23rd Ed., 4500- S2 F	Iodometric Method (Sulphide)
APHA/AWWA 23rd Ed., 4500- SiO <sub>2</sub> -C, 22P and P	Total Silicates
APHA/AWWA 23rd Ed., 4500- SO <sub>4</sub> E	Turbidimetric Method (Sulphate)
APHA/AWWA 23rd Ed., 5210B & 4500-OG	Biochemical Oxygen Demand (BOD)
APHA/AWWA 23rd Ed., 5220 D	Closed Reflux, Colorimetric Method (Chemical Oxygen Demand (COD))
APHA/AWWA 23rd Ed., 5310-B or C, 22P and P	Total Organic Carbon (TOC)
APHA/AWWA 23rd Ed., 5520 B	Oil & Grease
APHA/AWWA 23rd Ed., 5530 B&C, P	Phenol Concentrations
APHA/AWWA 23rd Ed., 6200 Volatile Organic Compounds	Organic Hydrocarbon
BS 1377-3 CL 5.4	Determination of the sulphate content of ground water
BS 1377-3 CL 8	Determination of total dissolved solids
BS 1377-3 CL 12	Determination of the pH value
BS EN ISO 10523	Water quality (Determination of pH)
ISO 4316 EI	Determination of pH of aqueous solutions - Potentiometric method
US EPA 6010C/3005A	Aluminum (Al), Barium (Ba), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Chromium (Cr), Cobalt (Co), Copper (Cu), Gallium (Ga), Indium (I), Iron (Fe), Lead (Pb), Lithium (Li), Magnesium (Mg), Manganese (Mn), Nickel (Ni), Potassium (K), Silver (Ag), Sodium (Na), S
US EPA 6010C/3050B	Aluminum (Al), Barium (Ba), Bismuth (Bi), Boron (B), Cadmium (Cd), Calcium (Ca), Chromium (Cr), Cobalt (Co), Copper (Cu), Gallium (Ga), Indium (I), Iron (Fe), Lead (Pb), Lithium (Li), Magnesium (Mg), Manganese (Mn), Nickel (Ni), Potassium (K), Silver (Ag), Sodium (Na), S
US EPA 8015D/1664B/9071B	TPH ((GRO (Gasoline rang organic), DRO (Diesel rang organic), Heavy fraction))
US EPA 8260C/5030/5035	VOC (volatile organic compound)
US EPA 8270D	SVOC (Semi volatile organic compound)
<b>Environmental Monitoring</b>	
ISO 1996-2	Noise
SOP-For AIR Quality	Ambient Air quality Monitoring

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Stack Emission USEPA Method 1,2,3,4 & 5	Method 1— Sample and Velocity Traverses for Stationary Sources Method 2— Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube) Method 3 - Gas Analysis for the Determination of Dry Molecular Weight METHOD 4— DETERMINATION OF MOISTURE CONTENT IN STACK GASES Method 5 - Particulate Matter (PM)
Stack Emission USEPA Method 25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
Testo 350 SOP	Stack emission
SOP-0129	Indoor Air Quality Monitoring
<b>Fertilizers</b>	
AOAC 958.01	Phosphorus in Fertilizers
AOAC 971.01	Potassium in Fertilizers
Danish Chemical Society 1983	Total Nitrogen in Fertilizers
<b>Food</b>	
BS EN 1186-1:2002	Guide to the selection and conditions and test methods of Overall migration
BS EN 11863	Determination of the overall Migration into aqueous food simulants by total Immersion
BS EN 11869:2002	Determination of the overall Migration into aqueous food simulants – By Article Filling
CCFRA 3.1.2 and CCFRA3.1.5:2007	Detection of Salmonella
Ioden value	Iodine absorption number of oil and fats (Wijs Method)
<b>Food Container</b>	
ACES in-House Method SOP 59 HS (Hongkong Standard) 1003	Specific Migration of Heavy Metals
BS EN 13130-1:2004	Materials and articles in contact with foodstuffs — Plastics substances subject to limitation — Determination of formaldehyde in food simulants
DD CEN/TS 13130-23:2005	Materials and articles in contact with foodstuffs — Plastics substances subject to limitation — Determination of formaldehyde in food simulants
<b>Geotechnical Tests</b>	
ASTM D2435/D2435M	Determination of One Dimensional Consolidation Properties of Soils
ASTM D4543	Preparing Rock Core Specimens to Dimensional and Shape Tolerances
ASTM D4546	One Dimensional Swell of Cohesive Soils
ASTM D5607	Direct Shear on Rock
ASTM D5731	Standard Test Method for Determination of the Point Load Strength Index of Rock and Application to Rock Strength Classifications
ASTM D6951/D6951M	Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications

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ASTM D7012	Standard Test Method for Unconfined Compressive Strength of Intact Rock Core Specimens
ASTM G57	Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method (Electrical Resistivity Test)
BRE Digest 365	Soakaway design (Dissection)
BS 1377-5 CL 3	Methods of test for Soils for civil engineering purposes — Compressibility, permeability and durability tests (Determination of One Dimensional Consolidation Properties of Soils)
BS 1377-5 CL 5	Constant Head Permeability Test
BS 1377-7-CL 3	Vane Shear Test
BS 1377-7 CL 4	Methods of test for Soils for civil engineering purposes — Shear strength tests (total stress) (Determination of shear strength by direct shear (small shearbox apparatus))
BS 1377-7 CL 5	Methods of test for soils for civil engineering purposes. Shear strength tests (total stress) (Direct Shear on Soil (Large Box))
BS 1377-9 CL 3.3 (EN ISO 22476-3+A1 (E))	Geotechnical investigation and testing — Field testing — Standard penetration test (Determination of the penetration resistance using the split-barrel sampler (the standard penetration test SPT))
BS 1377-9 CL 4.1	Determination of the vertical deformation and strength characteristics of soil by the plate loading test
BS 1377-9 CL 4.3	Methods of test for Soils for civil engineering purposes — In-situ tests (Determination of the in- situ California Bearing Ratio (CBR))
BS 5930 CL 22	Code of practice for site investigations (Soil Sampling)
BS 5930 CL 23	Code of practice for site investigations (Ground Water Sampling)
BS 5930 CL 23, 27, 47	Code of practice for site investigations (Ground Water Level Measurement)
BS 5930 CL 25	Code of practice for site investigations (Falling Head Permeability Test)
BS 5930 CL 25	Code of practice for site investigations (Packer Test)
BS 5930 CL tion 6	Description of Soil & Rock
CIRIA-Mair and Wood	Pressuremeter testing methods and interpretation (Pressuremeter HPD)
<b>Geotextile</b>	
ASTM D4533/D4533M	Trapezoid Tearing Strength of Geotextiles
ASTM D5199-12	Thickness Under Pressure 2 Kpa
BS EN 946	Thickness Under Pressure 2 Kpa
BS EN ISO 10319	Geosynthetics — Wide width tensile test
BS EN ISO 11058	Determination of water permeability characteristics normal to the plane, without load
BSEN ISO 12236	CBR Puncture Resistance
BS EN ISO 13433	Dynamic perforation test (cone drop test)
<b>Geotextile &amp; Waterproofing</b>	
ASTM D412	Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers— Tension (Test Method A)

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ASTM D714	Standard Test Method for Evaluating Degree of Blistering of Paints (After Sulphuric Acid Immersion Test for Internal Lining - per ASTM D543)
ASTM D751	Standard Test Methods for Coated Fabrics - Bursting Strength - Cl. 18
ASTM D1000	Standard Test Methods for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications - Adhesion Strength to Steel and Backing (Cl. 46 - 53)
ASTM D3787	Standard Test Method for Bursting Strength of Textiles—Constant-Rate-of-Traverse (CRT) Ball Burst Test
ASTM D5034, G-E and MG-E	Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab and Modified Grab Test)
ASTM D5035	Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
ASTM D5261	Standard Test Method for Measuring Mass per Unit Area of Geotextiles
BS EN ISO 5084	Determination Of Thickness Of Textiles
BS EN 12127	Textiles. Fabrics. Determination of mass per unit area using small samples. (Determination Of Mass Per Unit Area (Weight))
BS EN ISO 12956	Geotextiles and geotextile- related products. Determination of the characteristic opening size. (Pore Size)
<b>HDPE Pipe</b>	
BS EN ISO 527-1 CL 10.1	Plastics — Determination of tensile properties Part 1: General principles 10.1 Stress
EN ISO 580 Referred from BS EN 12666-1	Plastics piping systems — Unplasticized poly (vinyl chloride) (PVC-U) pipes — Test methods for the resistance to dichloromethane at a specified temperature (DCMT)
EN ISO 3126 CL 5.2, 5.3.2, 5.3.3, 5.3.4, 5.4	Plastics piping systems — Plastics components — Determination of dimensions, 5.2 Wall Thickness, 5.3.2 Measurement of maximum and minimum diameter, 5.3.3 Mean Outside Diameter, 5.3.4 Mean Inside Diameter, 5.4 Out-of-Roundness
BS 6920-2.2.1+A2	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water — Part 2: Methods of test — Section 2.2: Odour and flavour of water — Subsection 2.2.1: General method of test
BS 6920-2.4+A2	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water ⌀ Part 2: Methods of test ⌀ Section 2.4: Growth of aquatic microorganisms test
BS 6920-2.6+A2	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water — Part 2: Methods of test — Section 2.6: The extraction of metals
EN 12099	Plastics piping systems - Polyethylene piping materials and components - Determination of volatile content
BS EN 12201-2:2011+A1:2013, CL 5.1, 5.2, 6.1, 6.2, 6.3	Plastics piping systems for water supply, and for drainage and sewerage under pressure — Polyethylene (PE) Part 2: Pipes, 5.1 Appearance, 5.2 Colour, 6.1 Measurements, 6.2 Mean outside diameter, out-of-roundness (ovality) and tolerances, 6.3 Wall thicknesses and their tolerances

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EN 12201-2 CL 11	Plastics piping systems for water supply, and for drainage and sewerage under pressure — Polyethylene (PE) Part 2: Pipes, 11. Marking
EN 12666-1 CL 5.2, 6.1, 6.2.1, 6.2.3	Plastics piping systems for non-pressure underground drainage and sewerage - Polyethylene (PE) — Part 1: Specifications for pipes, fittings and the system, 5.2 Colour, 6 Geometrical characteristics 6.1 General, 6.2.1 Outside diameter, 6.2.3 Wall thickness
EN ISO 13479	Polyolefin pipes for the conveyance of fluids — Determination of resistance to crack propagation — Test method for slow crack growth on notched pipe
EN ISO 15512 CL 3	Plastics — Determination of water content 3. Method A — Extraction with anhydrous methanol
ISO 1133 CL 8	Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics Part 1: Standard method 8. Procedure A: Mass- measurement method
ISO 1167-1	Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 1: General method
ISO 1167-2	Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 2: Preparation of pipe test pieces
ISO 1183-1 CL 5.1	Plastics — Methods for determining the density of non-cellular plastics Part 1: Immersion method, liquid pycnometer 5.1 Method A — Immersion method
ISO 2505	Thermoplastics pipes — Longitudinal reversion — Test method and parameters
ISO 4065	Thermoplastics pipes — Universal wall thickness table
ISO 4427-2 CL 5.1, 5.2, 6.1, 6.2, 6.3	Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 2: Pipes, 5.1 Appearance, 5.2 Colour, 6.1 Measurements, 6.2 Mean outside diameter and out-of-roundness (ovality) 6.3 Wall thickness and their tolerances
ISO 4427-2 CL 7	Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 2: Pipes, 7. Mechanical characteristics (Hydrostatic strength), (Maximum diameter 560 mm)
ISO 4427-2 CL 11	Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 2: Pipes 11. Marking
ISO 4433-1	Thermoplastics pipes — Resistance to liquid chemicals — Classification — Part 1: Immersion test method Chemical Characteristics of Pipes in contact with Chemicals
ISO 4433-2	Thermoplastics pipes — Resistance to liquid chemicals — Classification — Part 2: Polyolefin pipes Chemical Characteristics of Pipes in contact with Chemicals
ISO 6259-1 CL 10.2	Thermoplastics pipes — Determination of tensile properties, Part 1: General test method. 10.2 Elongation at break
ISO 6259-3	Thermoplastics pipes — Determination of tensile properties Part 3: Polyolefin pipes
ISO 6964 CL 4	Polyolefin pipes and fittings — Determination of carbon black content by calcination and pyrolysis — Test 4 Method A: Electrical tube furnace
ISO 9969	Thermoplastics pipes — Determination of ring stiffness





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ISO 11357-6	Plastics — Differential scanning calorimetry (DSC) Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT)
ISO 11922-1 CL 6	Thermoplastics pipes for the conveyance of fluids — Dimensions and tolerances — Part 1: Metric series 6. Measurement of dimensions
ISO 13953	Polyethylene (PE) pipes and fittings — Determination of the tensile strength and failure mode of test pieces from a butt-fused joint.
ISO 18553 CL 4.1.2, 4.2	Method for the assessment of the degree of pigment or carbon black dispersion in polyolefin pipes, fittings and compounds, 4.1.2 Microtome procedure, 4.2 Microscopic examination
QCS 2014	QCS Section 08: Drainage Works, Part 03 Pipes & Fitting Materials, 3.10.2 Manufacturer 12. Markings
<b>Leakage Testing of Buildings</b>	
AAMA 501.2	Quality Assurance and Diagnostic Water leakage field check for Storefronts, Curtain Walls and Sloped Glazing Systems
<b>Masonry Blocks &amp; Paving Units</b>	
ASTM C140/C140M CL 8	Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units (Water Absorption for Interlocks)
BS 6073-1	Compressive Strength of Concrete Masonry Blocks
BS 6717 Annex B	Precast, unreinforced concrete paving blocks — Requirements and test methods (Measurement of Dimensions of Paving Blocks)
BS 6717 Annex B	Compressive Strength of Paving Blocks
BS 6717 Annex E	Tensile Strength of Paving Blocks
BS EN 771 +A1 (BS EN 772-11)	Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units
BS EN 771 1-2011+A1 (BS EN 772 1-2011+A1)	Determination of compressive strength
BS EN 771-1 (BS EN 772-1)	Determination of compressive strength
BS EN 771-1 (BS EN 772-7)	Methods of test for masonry units - (Determination of water absorption of clay masonry damp proof course units by boiling in water)
BS EN 771-1 (BS EN 772-16)	Specification for masonry units - Clay masonry units (Determination of Dimensions)
EN 771-3	Water Absorption for Masonry Blocks
BS EN 772-2 clause 8.2.3	Methods of test for masonry units. Determination of percentage area of voids in masonry units (by paper indentation)
BS EN 1338 Annex C	Concrete paving blocks — Requirements and test methods (Measurement of the dimensions of a single block)
BS EN 1338 Annex E	Water Absorption for Paving Blocks
BS EN 1338 Annex F	Tensile Strength of Paving Blocks
BS EN 1339 Annex C	Concrete paving flags — Requirements and test methods (Measurement of the dimensions of a single flag)
BS EN 1339 Annex E	Determination of total water absorption

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BS EN 1339 Annex F	Measurement of bending strength and breaking load
EN 1340 Annex C	Measurement of dimensions of a single unit
EN 1340 Annex E	Determination of total water absorption
BS EN 1340 Annex F	Concrete kerb units — Requirements and test methods (Measurement of bending strength)
BS EN 13748-1 CL 5.5	Terrazzo tiles — Terrazzo tiles for internal use (Breaking strength and breaking load)
BS EN 13748-1 CL 5.8	Terrazzo tiles — Terrazzo tiles for internal use (Water absorption)
<b>Microbiology — Water and Wastewater</b>	
APHA 23rd Ed., 9230-C	Fecal Streptococcus
APHA 23rd Ed., 9260-J	Legionella
APHA/AWWA 22nd Ed., 923-E	Pseudomonas Aeruginosa
APHA/AWWA 23rd Ed., 9222B & 9222D	Total Coliforms
APHA/AWWA 23rd Ed., 9222D	Fecal Coliform
APHA/AWWA 23rd Ed., 9223 B	Enzyme Substrate Test (E- Coli)
APHA/AWWA 23rd Ed., 9223 B	Enzyme Substrate Test (Fecal Coliform)
APHA/AWWA 23rd Ed., 9223 B	Total Coliforms
NIOSH 0800 & ISO 16000-17:2011	Bioaerosol Sampling (Indoor Air)
WHO, Lab manual of Parasitological and Bacteriological Techniques, 1996	Nematodes (Helminths) Eggs
<b>Non Destructive Test</b>	
ASME 0 CLV	Standard Practice for Liquid Penetrant Examination for General Industry
ASME 0 CL V	Standard Guide for Magnetic Particle Testing
ASTM C805/C805M	Standard Test Method for Rebound Number of Hardened Concrete1
ASTM C900	Standard Test Method for Pullout Strength of Hardened Concrete
ASTM D2950/D2950M	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D4541	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
ASTM D4694	Deflections with a Falling- Weight-Type Impulse Load Device
ASTM D4787	Standard Practice for Continuity Verification of Liquid or Sheet Linings Applied to Concrete Substrates
ASTM D4945	High-Strain Dynamic Testing of Deep Foundations (Pile Dynamic Test)

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ASTM D5162 Method B	Standard Practice for Discontinuity (Holiday) Testing of Nonconductive Protective Coating on Metallic Substrates
ASTM D5882	Standard Test Method for Low Strain Impact Integrity Testing of Deep Foundations
ASTM D6132	Standard Test Method for Nondestructive Measurement of Dry Film Thickness of Applied Organic Coatings Using an Ultrasonic Coating Thickness Gage
ASTM D6167	Conducting Borehole Geophysical Logging: Mechanical Caliper
ASTM D6433	Roads and Parking Lots Pavement Condition Index Surveys, PCI
ASTM D6760	Standard Test Method for Integrity Testing of Concrete Deep Foundations by Ultrasonic Crosshole Testing
ASTM D7091 Type 2 gage	Standard Practice for Nondestructive Measurement of Dry Film Thickness of Nonmagnetic Coatings Applied to Ferrous Metals and Nonmagnetic, Nonconductive Coatings Applied to Non-Ferrous Metals
ASTM D7234	Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete Using Portable Pull-Off Adhesion Testers
ASTM E164	Contact Ultrasonic Testing of Weldments
ASTM E165/E165M	Standard Practice for Liquid Penetrant Examination for General Industry
ASTM E303	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
ASTM E709	Standard Guide for Magnetic Particle Testing
ASTM E950	Standard Practice for Computing International Roughness Index of Roads from Longitudinal Profile Measurements
ASTM E950/E950M	Measuring the Longitudinal Profile of Traveled Surfaces with an Accelerometer Established Inertial Profiling Reference
ASTM E1703	Measuring Rut-Depth of Pavement Surfaces Using a Straightedge
ASTM E1926 and ASTM E950	Standard Practice for Computing International Roughness Index of Roads from Longitudinal Profile Measurements
ASTM G62 Method B	Standard Test Methods for Holiday Detection in Pipeline Coatings
BS 1881-204	Testing concrete (Recommendations on the use of electromagnetic covermeters)
BS 3262-1 Append. J	Determination of Skid Resistance
BS EN 12504-2	Testing concrete in structures Non-destructive testing — (Determination of rebound number)
BS EN-12504-3	Testing concrete in structures (Determination of pull-out force)
BS EN 12504-4	Determination of ultrasonic pulse velocity
BS EN 13036-4	Road and airfield surface characteristics. Test methods Method for measurement of slip/skid resistance of a surface: The pendulum test
BS EN 13036-7	Road and airfield surface characteristics. Test methods Irregularity measurement of pavement courses. The straightedge test
MS21-02 Method Statement for Concrete Steel Survey Using Ferrosan	Concrete steel survey using ferrosan

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SOP 069	Crack Width Gauge
SOP 069	Crack Measurement Microscope
QCS 2014: CL 6-5 & User Guide of Machine	Surface Irregularities Test - By 3 meter long Rolling Straightedge
TRL Road Note 27	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
<b>Oil</b>	
ASTM D93	Standard Test Methods for Flash Point by Pensky- Martens Closed Cup Tester
ASTM D97	Standard Test Methods for Pour point of Petroleum Products.
ASTM D130	Standard Test Method for Corrosiveness to Copper from Petroleum Products by Copper Strip Test
ASTM D445	Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity) @ 40C
ASTM D445	Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity) @ 100C
ASTM D664	Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration
ASTM D974	Acid Number
ASTM D1119	Standard Test Method for Percent Ash Content of Engine Coolants
ASTM D1120	Standard Test Method for Boiling Point of Engine Coolants
ASTM D1121	Standard Test Method for Reserve Alkalinity of Engine Coolants and Antirusts
ASTM D1287	Standard Test Method for pH of Engine Coolants and Antirusts
ASTM D1298	Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by the Hydrometer Method
ASTM D1401	Standard Test Method for Water Separability of Petroleum Oils and Synthetic Fluids
ASTM D1500	Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)
ASTM D2270	Viscosity Index from Kinematic Viscosity at 40 °C and 100 °C
ASTM E2412	(FT-IR) Spectrometry
ASTM D2501	Standard Test Methods for Calculation of viscosity-Gravity Constant (VGC) of Petroleum Oil
ASTM D2896	Standard Test Method for Base Number of Petroleum Products by Potentiometric Perchloric Acid Titration
ASTM D3427	Standard Test Method for Air Release Properties of Hydrocarbon Based Oils
ASTM D4052	Standard Test Methods for Density, Relative Density and API Gravity of Liquids by Digital Density Meter
ASTM D5293	Standard Test Methods for Apparent Viscosity of Engine oil and base stocks between -10°C and -35°C using cold-cranking simulator.
ASTM D6304	Standard Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration
ASTM D7946	Standard Test Method for Initial pH for Petroleum Products

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<b>Paint</b>	
ASTM B117	Operating Salt Spray (Fog) Apparatus
ASTM C309	Drying Time Test
ASTM C639	Rheological (Flow) Properties of Elastomeric Sealants
ASTM C679	Tack free time of paints primer coatings etc
ASTM C792	Effects of heat aging
ASTM D522	Methods for Mandrel Bend Test of Attached Organic Coatings, Method B
ASTM D523	Paints and Varnishes - Determination of Specular Gloss of Non-Metallic Paint Films at 20o and 60o and 85o
ASTM D562	Standard Test Method for Consistency of Paints Measuring Krebs Unit (KU) Viscosity Using a Stormer- Type Viscometer
ASTM D1005	Standard Test Method for Measurement of Dry-Film Thickness of Organic Coatings Using Micrometers
ASTM D1210	Standard Test Method for Fineness of Dispersion of Pigment-Vehicle Systems by Hegman-Type Gage
ASTM D1212	Measurement of Wet Film Thickness of Organic Coatings
ASTM D1475	Standard Test Method For Density of Liquid Coatings, Inks, and Related Products
ASTM D1640/D1640M	Standard Test Method for Drying, Curing, or Film Formation of Organic Coatings, Method B
ASTM D1647	Standard Test Methods for Resistance of Dried Films of Varnishes to Water and Alkali
ASTM D2196	Rheological Properties of Non-Newtonian Materials by Rotational Viscometer
ASTM D2369	Standard Test Method for Volatile Content of Coatings
ASTM D2370	Tensile Properties of Organic Coatings
ASTM D2486	Standard Test Method for Scrub Resistance of Wall Paints
ASTM D3359	Standard Test Methods for Rating Adhesion by Tape Test
ASTM D3723	Standard Test Method for Pigment Content of Water- Emulsion Paints by Low-Temperature Ashing
ASTM D4400	Standard Test Method for Sag Resistance of Paints Using a Multinotch Applicator
ASTM D4414	Standard Practice for Measurement of Wet Film Thickness by Notch Gages
ASTM D4541	Adhesion (Pull off) strength
ASTM D5401	Standard Test Method for Evaluating Clear Water Repellent Coatings on Wood
ASTM G154	Plastics- Methods of Exposure to Laboratory Light Sources (QUV)
BS EN 1871 Cl 4.3.2.5	Road marking materials. Paint, thermoplastic and cold plastic materials. Physical properties – UV ageing
BS EN ISO 787-9	Determination of pH value of aqueous suspension
BS EN ISO 1519 BS 3900-E1	Paints and varnishes. Bend test (cylindrical mandrel).
BS EN ISO 2409 (BS 3900-E9)	Paints and varnishes. Cross-cut test.

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BS EN ISO 2812-2	Standard Test Method for Evaluating Clear Water Repellent Coatings on Wood
BS EN ISO 2813	Paints and Varnishes - Determination of Specular Gloss of Non-Metallic Paint Films at 20o and 60o and 85o
BS EN ISO 2814	Average Reflectance (Calculation Method)
BS EN ISO 2814	Paints and varnishes - Comparison of contrast ratio (hiding power) of paints of the same type and colour
BS EN ISO 4624	Paints and varnishes. Pull- off test for adhesion.
ISO 7724-2	Determination of color and color difference
<b>Pavement Markings</b>	
AASHTO M249	Crack resistance of thermoplastic material
AASHTO M249	Standard Specification for White and Yellow Reflective Thermoplastic Striping Material (Solid Form) (Daylight reflectance at 45°)
AASHTO M249	Standard Specification for White and Yellow Reflective Thermoplastic Striping Material (Solid Form) (Drying Time for Road Marking)
AASHTO T250	Crack resistance of thermoplastic material
AASHTO T250 CL 5	Standard Method of Test for Thermoplastic Traffic Line Material (Determination of Binder Content)
AASHTO T250 CL 6	Standard Method of Test for Thermoplastic Traffic Line Material (Determination of Glass beads Content)
ASTM D711	Drying time of thermoplastic material
ASTM D4414	Standard Practice for Measurement of Wet Film Thickness by Notch Gages
ASTM D4797	Standard Method of Test for Thermoplastic Traffic Line Material (Determination of Binder Content)
ASTM D4797 CL 11	Standard Method of Test for Thermoplastic Traffic Line Material (Determination of Glass beads Content)
ASTM E1710	Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer
ASTM E2302	Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer
ASTM G154	Plastics- Methods of Exposure to Laboratory Light Sources (QUV)
BS 2000-35	Petroleum and its Products. Determination of flash and fire Point-Pensky - Martens method (Flash Point (Open) of Thermoplastic Material)
BS 3262-1 Append. C	Binder Content of Thermoplastic Material
BS 3262-1 Append. D	Glass Bead Content of Thermoplastic Material
BS 3262-1 Append. D	Combined Gradation of Material
BS 3262-1 Append. F	Hot-applied thermoplastic road marking materials and mixtures — Specification for constituent materials and mixtures (Luminance Factor)
BS 3262-1 Append. H	Determination of Flow Resistance
BS 3262-3–Ap. B	Hot-applied thermoplastic road marking materials and mixtures — Specification for application of material to road surfaces (Drying Film Thickness)
BS 3262-3 Append. C	Determination of density

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BS 6088 Appendix B	Solid glass beads for use with road marking compounds and for other industrial uses (Particle Size Distribution of Glass Beads)
BS EN 1436 Annex A&B	Road marking materials — Road marking performance for road users (Measurement of Retro- reflectivity of pavement marking materials)
BS EN 1871 Cl 4.3.2.4	Road marking materials. Paint, thermoplastic and cold plastic materials. Physical properties - Cold impact resistance
BS EN 1871 Cl 4.3.2.5	Road marking materials. Paint, thermoplastic and cold plastic materials. Physical properties – UV ageing
BS EN 13197 Annex C / 2011	Wet Film Thickness by Notch Gauge
<b>Performance Graded Asphalt Binder</b>	
AASHTO R28	Standard Practice for Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)
AASHTO R29	Standard Practice for Grading or Verifying the Performance Grade (PG) of an Asphalt Binder
AASHTO T048	Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester
AASHTO T44	Solubility of Asphalt Material In Trichloroethylene
AASHTO T240	Test Method for Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin-Film Oven Test) RTFOT
AASHTO T313	Standard Test Method for Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)
AASHTO T315	Standard Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
AASHTO T316	Standard Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer (RV)
AASHTO T350	Standard Test Method for Multiple Stress Creep and Recovery (MSCR) of Asphalt Binder Using a Dynamic Shear Rheometer
ASTM D5/D5M	Standard Test Method for Penetration of Bituminous Materials
ASTM D6/D6M	Standard Test Method for Loss on Heating of Oil and Asphaltic Compounds
ASTM D36/D36M	Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)
ASTM D70	Density of Semi-Solid Bituminous Material (Pycnometer Method)
ASTM D88	Saybolt Viscosity
ASTM D92	Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester
ASTM D95	Water in Petroleum Products and Bituminous Material by Distillation
ASTM D113	Standard Test Method for Ductility of Bituminous Materials
ASTM D139	Standard Test Method for Float Test for Bituminous Materials
ASTM D140	Standard Practice for Sampling Bituminous Materials
ASTM D402/D402M	Standard Test Method for Distillation of Cutback Asphalt
ASTM D2042	Solubility of Asphalt Material In Trichloroethylene
ASTM D2170/D2170M	Kinematic Viscosity @ 60°C

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ASTM D2872	Test Method for Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin-Film Oven Test) RTFOT
ASTM D2995	Standard Practice for Estimating Application Rate of Bituminous Distributors
ASTM D4402/D4402M	Standard Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer (RV)
ASTM D5546	Standard Test Method for Solubility of Asphalt Binders in Toluene by Centrifuge
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 D6930	Settlement and Storage Stability of Emulsified Asphalts
ASTM D6933	Standard Test Method for Oversized Particles in Emulsified Asphalts (Sieve Test)
ASTM D6935	Standard Test Method for Determining Cement Mixing of Emulsified Asphalt
ASTM D6997	Distillation of Emulsified Asphalt
ASTM D7173	Standard Practice for Determining the Separation Tendency of Polymer from Polymer Modified Asphalt
ASTM D7175	Standard Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
ASTM D7402	Standard Practice for Identifying Cationic Emulsified Asphalts
ASTM D7405	Standard Test Method for Multiple Stress Creep and Recovery (MSCR) of Asphalt Binder Using a Dynamic Shear Rheometer
ASTM D7496	Standard Test Method for Viscosity of Emulsified Asphalt by Saybolt Furol Viscometer
BS 2000-49	Determination of Needle Penetration
BS 2000-58	Bitumen and bituminous binders - (Determination of Softening Point (Ring & Ball Method))
BS 3262-3 Append. C	Determination of density
BS EN 1426	Determination of Needle Penetration
BS EN 1427-2007	Bitumen and bituminous binders - (Determination of Softening Point (Ring & Ball Method))
<b>PVC Pipe</b>	
BS 2782-11 Method 1108B	Plastics piping and ducting systems. Thermoplastics pipes. Determination of resistance to external blows by the staircase method
BS 2782-11 Method 1108C	Plastics piping and ducting systems. Thermoplastics pipes. Test method for resistance to external blows by the round-the- clock method.
BS EN 580	Resistance to Dichloromethane
BS EN 744	Plastics piping and ducting systems. Thermoplastics pipes. Test method for resistance to external blows by the round-the- clock method.
BS EN 1411	Plastics piping and ducting systems. Thermoplastics pipes. Determination of resistance to external blows by the staircase method
BS EN ISO 2505	Longitudinal Reversion

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BS EN 61386-1, CL 7.6	Marking and documentation
BS EN 61386-1, CL 8 & Annex B.1	Dimensions
BS EN 61386-1, CL 10.2	Compression test
EN 61386-1, CL 10.3	Impact Test
EN 61386-1, CL 10.4	Bending Test
EN 61386-1, CL 10.6,	Collapse test
EN 61386-1, CL 13.1.3.2	Fire hazard
GSO 32, CL 4.3	Marking and documentation
GSO 32, CL 4.4	Dimensions
GSO 32, CL 5	Compression test
GSO 32, CL 6.2	Bending Test
GSO 32 CL 8	Fire hazard
GSO 32, CL 10	Impact Test
GSO 32, CL 11	Collapse test
IEC 61386-21, CL 10.4.102	Bending Test
IEC 61386-21, CL 10.6.102	Collapse test
<b>Pipe</b>	
ISO 15874-2 / ISO 1133 - 1	Determination of mass flow rate and mass flow volume of thermoplastics
ISO 15874-2 / ISO 1167- 1 & 2	Determination of the resistance to internal pressure
ISO 15874-2 / ISO 2505 (Method B)	Thermoplastic pipe - longitudinal reversion test
ISO 15874-2 / ISO 3126:2005	Plastic piping system/determination of dimensions
ISO 15874-2 / ISO 9854 - 1& 2	Determination of pendulum impact strength by the use of charpy method
<b>Reaction to fire tests</b>	
BS EN ISO 9239-1	Reaction to fire tests for floorings - Part 1: Determination of the burning behaviour using a radiant heat source.
ISO 1182	Reaction to fire tests for products — Non-combustibility test
ISO 1716	Reaction to fire tests for products — Determination of the gross heat of combustion (calorific value)
ISO 11925-2	Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Part 2: Single-flame source test
<b>Resistance To Fire</b>	
ASTM E119-22	Standard Test Methods for Fire Tests of Building Construction and Materials
ASTM E2226	Standard Practice for Application of Hose Stream
BS EN 1363-1	Fire resistance tests - Part 1: General Requirement

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	Excluding: 4.3, 4.5.3, 4.6d, 5.2.2.3, 5.2.3, 5.4, 5.5, 9.2.3, 10.2, 10.4.4.2, 10.4.6, 11.1, 11.4.1, 12.1k, Annex D
BS EN 1363-2	Fire resistance tests - Part 2: Alternative and Additional Procedures Excluding: 4, 5, 6, 7, 8.2
BS EN 1364-1	Fire resistance tests for non-loadbearing elements Part 1: Walls Excluding: 9.5
BS EN 1634-1+A1	Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware Part 1: Fire resistance test for doors, shutters and openable windows. Excluding: 8.2
BS 476-20	Fire Tests on Building Materials and Structure Part 20: Method of Determination of the Fire Resistance of Elements of Construction (General Principle) Excluding: 5.2, 5.3, 6.1.1b, 6.1.1c, 6.1.1d, 6.1.4, 6.2, 6.3, 9.1.2, 10.2, 11.2, 12l, A.4, A10, B, C.1.4, C4.1.3.2, C4.1.3.4, C7.3.3, C10.2, Fig. 1
BS 476-22	Fire Tests on Building Materials and Structure Part 22: Methods for determination of the fire resistance of non-loadbearing elements of construction. Excluding: 9, A.3
<b>Soil</b>	
ASTM D1140	Determining the Amount of Material Finer than 75-µm (No. 200) Sieve in Soils by Washing
ASTM D1556/D1556M	Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft <sup>3</sup> (2,700 kN-m/m <sup>3</sup> ))
ASTM D1883	CBR (California Bearing Ratio) of Laboratory- Compacted Soils (Soaked)
ASTM D2216-10	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D4253	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4254	Standard Test Methods for Minimum Index Density and Unit Weight of Soils and calculation of relative density
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4429	Standard Test Method for CBR (California Bearing Ratio) of Soils in Place
ASTM D4718/D4718M	Standard Practice for Correction of Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4944	Field Determination of Water (Moisture) Content of Soil by the Calcium Carbide Gas Pressure Tester
ASTM D5334	Standard Test Method for Determination of Thermal Conductivity of Soil and Soft Rock by Thermal Needle Probe Procedure
ASTM D6913	Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis



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ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
ASTM D7625	Abrasiveness of Rock Using the CERCHAR Method
BS 1377-2 CL 3.2	Methods of test for Soils for civil engineering purposes (Determination of Moisture Content (Oven Drying method))
BS 1377-2 CL 4.5	Determination of Liquid Limit (Casagrande Method)
BS 1377-2 CL 5	Methods of test for Soils for civil engineering purposes (Determination of Plastic Limit and Plasticity Index)
BS 1377-2 CL 6.5	Methods of test for Soils for civil engineering purposes (Linear shrinkage)
BS 1377-2 CL 7	Methods of test for Soils for civil engineering purposes (Linear shrinkage)
BS 1377-2 CL 9.2	Determination of Particle Size Distribution (Wet Sieve Method)
BS 1377-2 CL 9.3	Determination of Particle Size Distribution (Dry Sieve Method)
BS 1377-4 CL 3.2 & 3.5 & 3.6	Methods of test for Soils for civil engineering purposes Compaction Related Test (Proctor Test) (Using 4.5 kg Rammer)
BS 1377-4 CL 7	Determination of California Bearing Ratio (CBR)
BS 1377-9 CL 2.1	In-Situ Density Test (Sand Replacement Method- Small Pouring Cylinder)
BS 1377-9 CL 2.2	Methods of test for Soils for civil engineering purposes (In-Situ Density Test (Sand Replacement Method - Large Pouring Cylinder))
BS 1377-9 CL 2.5	Methods of test for Soils for civil engineering purposes (In-Situ Density Test (Nuclear Gauge Method))
BS 1377-9 CL 4.1	Determination of the vertical deformation of soil by plate loading test
BS EN 13286-41	Unbound and hydraulically bound mixtures (Test method for determination of the compressive strength of hydraulically bound mixtures)
BS EN 13286-51	Unbound and hydraulically bound mixtures (Method for the manufacture of test specimens of hydraulically bound mixtures using vibrating hammer compaction)
BS EN ISO 17892-1	Determination of water content
BS EN 17892-4	Determination of Particle Size Distribution (Wet Sieve Method)
BS EN 17892-4	Determination of Particle Size Distribution (Dry Sieve Method)
BS EN 17892-12	Determination of Liquid Limit (Casagrande Method)
BS EN 17892-12	Methods of test for Soils for civil engineering purposes (Determination of Plastic Limit and Plasticity Index)
BS EN ISO 17892-1	Determination of water content
BS EN ISO 17892-2	Determination of bulk density
ISO/TS 17892	Determination of Atterberg limits
<b>Steel</b>	
ASME_BPVC_2021-Section IX	ASME Boiler and Pressure Vessel Code Qualification Standard for Welding, Brazing, and Fusing Procedures: Welders> Brazers: and Welding, Brazing, and Fusing Operators Clause: QW-140-1 Types and purposes of test and Examinations QW-150-Tension Test QW-160-Guided Bend Test QW-183-184Macro Examination Test
ASTM A370 CL 6	Mechanical Testing of Steel Products

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ASTM A416/A416M	Standard Specification for Low-Relaxation, Seven-Wire Steel Strand for Prestressed Concrete
ASTM A416/A416M	Yield Strength— Elongation - Breaking Strength
ASTM A615/A615M	Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
ASTM A931	Standard Test Method for Tension Testing of Wire Ropes and Strand
ASTM A1034	Standard Test Methods for Testing Mechanical Splices for Steel Reinforcing Bars Monotonic Tension test Monotonic Compression test
ASTM A1061/ A1061M	Yield Strength— Elongation - Breaking Strength
BS 4449 App.C, CL 6.1	Bend Test
BS 4449: App.E CL E1.6	Rebend Test
BS 4449+A3 (App.C, CL 1.4)	Metallic Materials Tensile Testing (Tensile Test)
BS 5896	Tensile test - Yield Strength— Elongation
BS EN 124 CL 8	Load Test
BS EN 124-1	Load Test
BS EN 124-2	Load Test- Gully tops and manhole tops made of cast iron
BS EN 124-3	Load Test- Gully tops and manhole tops made of steel or aluminum alloys
BS EN 124-4	Load Test- Gully tops and manhole tops made of steel reinforced concrete
BS EN 124-5	Load Test- Gully tops and manhole tops made of composite materials
BS EN 124-6	Load Test- Gully tops and manhole tops made of polypropylene (PP), polyethylene (PE) or unplasticized poly (vinyl chloride) (PVC-U)
BS EN 10002-1	Tensile Test
BS EN ISO 6892-1- CL 18	Metallic Materials Tensile Testing (Tensile Test)
BS EN ISO 15630-3 Clause 9	Steel for the reinforcement and prestressing of concrete - Test Methods, Part 3 - Prestressing Steel - Cl 9 Isothermal stress relaxation test
ISO 15630-1 CL 5 (E)	Metallic Materials Tensile Testing (Tensile Test)
ISO 15630-3(E)	Tensile test - Yield Strength— Elongation
<b>Steel Chemistry</b>	
ASTM E415	Standard Test Method for Analysis of Carbon and Low- Alloy Steel by Spark Atomic Emission Spectrometry (C, Si,S, P, Mn, Ni, Cr, Mo,Cu, Sn, Al, V, Pb, V )
<b>Thermal Insulating Products</b>	
ASTM C518-17	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
ASTM D1621-16	Standard Test Method for Compressive Properties of Rigid Cellular Plastics.
ASTM D1622/D1622M-14	Standard Test Method for Apparent Density of Rigid Cellular Plastics.
ASTM D2842-19	Standard Test Method for Water Absorption of Rigid Cellular Plastics.
BS EN 1602:1997	Determination of Apparent Density
BS EN 1607:2013	Thermal insulating products for building applications. Determination of tensile strength perpendicular to faces

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BS EN 1609:2013	Thermal insulating products for building applications. Determination of short term water absorption by partial immersion
BS EN 12664	Thermal performance of building materials and products - Determination of thermal resistance (R value) by heat flow meter method.
BS EN ISO 16535:2019	Thermal insulating products for building applications. Determination of long-term water absorption by immersion
EN ISO 148-1:2016	Standard test method for Charpy Impact Pendulum Test
ISO 945-1:2019	Standard test method for Graphite Classification for Visual Analysis
<b>Thermal performance of building material and products</b>	
BS EN 12664	Thermal performance of building materials and products - Determination of thermal resistance (R value) by heat flow meter method.
<b>Toys</b>	
BS EN 71-1	Safety of toys. Mechanical and physical properties, CL 8.8 Compression test, CL 8.9 Soaking test-clause, CL 8.4 Tension test-clause, CL 8.5 Drop test-clause, CL 8.21 Static strength test, CL 8.2 Small parts cylinder, CL 8.11 Sharpness of edges, CL 8.12 Sharpness of points, CL 8.10 thru 8.10.3 Accessibility of a part or component
BS EN 71-2 +A1	Flammability test
BS EN 71-3 +A2-3	Safety of Toys: Migration of Certain Elements – Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Chromium (III), Chromium (VI), Cobalt, Copper, Lead, Manganese, Mercury, Nickel, Selenium, Strontium, Tin, Zinc
<b>UPVC Pipe</b>	
ASTM D256 – 04 Method A	Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics Method A
BS EN ISO 527-1 CL 10.1	Plastics — Determination of tensile properties Part 1: General principles, 10.1 Stress
BS EN ISO 527-2	Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics
BS EN 727:1995	Plastics piping and ducting systems — Thermoplastics pipes and fittings — Determination of Vicat softening temperature (VST)
BS EN 1401-1 CL 6.2	Plastic piping systems for non-pressure underground drainage and sewerage — Unplasticized poly (vinyl chloride) (PVC-U) Part 1: Specifications for pipes, fittings and the system, Cl 5.1 Appearance, colour, Cl 5.2 Colour, Cl 6.2.1 Outside diameters Cl 6.2.2 Out of roundness Cl 6.2.5 Wall thickness
BS EN 1401-1 CL 12	Plastic piping systems for non-pressure underground drainage and sewerage — Unplasticized poly (vinyl chloride) (PVC-U) Part 1: Specifications for pipes, fittings and the system 12. Marking
EN ISO 3126 CL 5.2, 5.3.2, 5.3.3, 5.3.4, 5.4	Plastics piping systems — Plastics components — Determination of dimensions, 5.2 Wall Thickness, 5.3.2 Measurement of maximum and minimum diameter, 5.3.3 Mean Outside Diameter, 5.3.4 Mean Inside Diameter, 5.4 Out-of-Roundness
ISO 1167-1	Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 1: General method

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ISO 1167-2	Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 2: Preparation of pipe test pieces
ISO 1183-1 CL 5.1	Plastics — Methods for determining the density of non-cellular plastics Part 1: Immersion method, liquid pycnometer 5.1 Method A — Immersion method
ISO 2505:2005	Thermoplastics pipes — Longitudinal reversion — Test method and parameters
<b>Water Proofing Membrane &amp; Rubber</b>	
ASTM D412	Tensile strength of Vulcanized Rubber and Thermoplastic Elastomers
ASTM D543	Evaluating the Resistance of Plastics to Chemical Reagents
ASTM D570	Water Absorption of Plastics
ASTM D638	Tensile Properties of Plastics
ASTM D714	Sulphuric Acid Immersion Test of Internal Lining
ASTM D792	Density and Specific Gravity (Relative Density) of Plastics by Displacement
ASTM D882	Tensile Properties of Thin Plastic Sheeting
ASTM D903	Peel or Stripping Strength of Adhesive Bonds
ASTM D1000	Pressure-Sensitive Adhesion to Primed Concrete
ASTM D1004	Tear Resistance (Graves Tear) of Plastic Film and Sheeting
ASTM D1238	Melt Flow Rates of Thermoplastics by Extrusion Plastometer
ASTM D1653	Vapor Permeability of Internal
ASTM D1709	Impact Resistance of Plastic Film by the Free- Falling Dart Method
ASTM D1876	Peel Resistance of Adhesives (T-Peel Test)
ASTM D2240	Rubber Property— Durometer Hardness
ASTM D3767	Rubber—Measurement of Dimensions (Thickness)
ASTM D4060	Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM E96/E96M	Water Vapor Transmission of Materials
ASTM E154 CL 10	Resistance to Puncture
BS EN 1849-2	Determination of thickness and mass per unit area of Plastic and rubber sheets
DIN 53854	Weight
DIN 53855	Thickness
DIN 54307	CBR test
ISO 527-1	Tensile Properties of Plastics

