Issue date: 28 July 2025
Valid Until: -

NO: SAMM 876

LABORATORY LOCATION/ CENTRAL OFFICE:	Architest Laboratory Sdn. Bhd. No 66 Jalan Sungai Burung AA32/AA, Bukit Rimau, Seksyen 32, 40460 Shah Alam, Selangor , 40460, SELANGOR MALAYSIA
ACCREDITED SINCE :	06 APRIL 2025
FIELD(S) OF TESTING:	CHEMICAL MECHANICAL
SITE:	
1 . SITE LABORATORY(HQ) :	Architest Laboratory Sdn. Bhd.
FIELD(S) OF TESTING :	Soil

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

CENTRAL LOCATION:	Architest Laboratory Sdn. Bhd. No 66 Jalan Sungai Burung AA32/AA, Bukit Rimau, Seksyen 32, 40460 Shah Alam, Selangor , 40460, Selangor
FIELD(S) OF TESTING :	CHEMICAL, MECHANICAL

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Aggregates	~~Determination of Potential Alkali Silica Reactivity of Aggregates (Chemical Method)~~ **(INOPERATIVE)**	~~ASTM C 289-07 – Standard Test Method for Potential Alkali Silica Reactivity of Aggregates (Chemical Method).~~ **(INOPERATIVE)**

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	~~Determination of Total Sulfur Content by Acid Digestion (Reference Method)~~ **(INOPERATIVE)**	~~BS EN 1744-1: 2009+A1: 2012 – Tests for Chemical Properties of Aggregates Part 1: Chemical Analysis: Clause 11.1: Determination of Total Sulfur Content by Acid Digestion (Reference Method)~~ **(INOPERATIVE)**
	~~Determination of Acid Soluble Sulfides~~ **(INOPERATIVE)**	~~BS EN 1744-1: 2009+A1: 2012 – Tests for Chemical Properties of Aggregates Part 1: Chemical Analysis: Clause 13: Determination of Acid Soluble Sulfides.~~ **(INOPERATIVE)**
	~~Determination of Water Soluble Chloride Salts Using the Volhard Method (Reference Method)~~ **(INOPERATIVE)**	~~BS EN 1744-1: 2009+A1: 2012 – Tests for Chemical Properties of Aggregates Part 1: Chemical Analysis: Clause 7: Determination of Water Soluble Chloride Using the Volhard Method (Reference Method).~~ **(INOPERATIVE)**
	~~Determination of Acid Soluble Sulfates~~ **(INOPERATIVE)**	~~BS EN 1744-1: 2009+A1: 2012 – Tests for Chemical Properties of Aggregates Part 1: Chemical Analysis: Clause 12: Determination of Acid Soluble Sulfates.~~ **(INOPERATIVE)**
	Determination of water soluble chloride salts	BS 812 : Part 117 :1988
	Determination of sulphate content	BS 812 : Part 118 :1988 (Gravimetric)
Concrete	Determination of chloride content	BS 1881: Part 124 : 1988, Clause 10.2
	Determination of sulphate content	BS 1881: Part 124 : 1988, Clause 10.3
Water	Determination of pH	APHA 4500-H^+ B, 2005
	Determination of chloride	APHA 4500-Cl^- B, 2005
	Determination of sulphate	APHA 4500-SO_4^{2-} C, 2005
	Determination of alkalinity	APHA 2320 B, 2005
	Determination of total solids	APHA 2540 B, 2005
Soil	Determination of pH value	BS 1377 : Part 3: 1990, Clause 9
	Determination of chloride content	BS 1377 : Part 3: 1990, Clause 7
	Determination of sulphate content	BS 1377 : Part 3: 1990, Clause 5 (Gravimetric)
	Determination of organic matter content	BS 1377 : Part 3: 1990, Clause 3
	Determination of the mass loss on ignition	BS 1377: Part 3:1990, Clause 4

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Determination of the suplhate content of soil and ground water	BS 1377: Part 3:1990, Clause 5, 5.2, 5.3, 5.4 and 5.5
	Determination of In-situ Density and Moisture Content	Soils for Civil Engineering Purposes, BS 1377:1990, Part 9 : Clause 2.1- Sand Replacement Method Suitable for Fine and Medium-Grained Soils (Small Pouring Cylinder Method)
	Determination of Dry Density/ Moisture Content	Soils for Civil Engineering Purposes, BS 1377:1990, Part 4: Clause 3.3- Method Using 2.5 kg Rammer for Soils with Particles Up to Medium- Gravel Size Particles
		Soils for Civil Engineering Purposes, BS 1377:1990, Part 4: Clause 3.4- Method Using 2.5 kg Rammer for Soils with Coarse Medium-Gravel Size Particles
		Soils for Civil Engineering Purposes, BS 1377:1990, Part 4: Clause 3.5- Method Using 4.5 kg Rammer for Soils with Particles Up to Medium- Gravel Size Particles
		Soils for Civil Engineering Purposes, BS 1377:1990, Part 4: Clause 3.6- Method Using 4.5 kg Rammer for Soils with Some Coarse Gravel-Size Particles

SCOPE OF TESTING : MECHANICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Concrete	Determination of compressive strength	BS EN 12390: Part 3: 2009 & MS EN 12390: Part 3: 2012
Soil	Determination of moisture content	BS 1377 : Part 2: 1990, Clause 3.2
	Determination of particle size distribution – Dry Sieving	BS 1377 : Part 2: 1990, Clause 9.3
	Determination of particle size distribution – Hydrometer	BS 1377 : Part 2: 1990, Clause 9.5
	Determination of liquid limit	BS 1377 : Part 2: 1990, Clause 4.4
	Determination of plastic limit and plasticity index	BS 1377 : Part 2: 1990, Clause 5

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Determination of liquid limit (Cone penetrometer- definitive method)	BS 1377 : Part 2: 1990, Clause 4.3
	Determination of shrinkage characteristics (Linear shrinkage)	BS 1377 : Part 2: 1990, Clause 6.5
	Determination of particle density (Small pycnometer method)	BS 1377 : Part 2: 1990, Clause 8.3
	Determination of density (Linear measurement method)	BS 1377 : Part 2: 1990, Clause 7.2
	Determination of one dimensional consolidation properties	BS 1377 : Part 5: 1990, Clause 3
	Determination of the unconfined compressive strength (Load frame method)	BS 1377 : Part 7: 1990, Clause 7.2
	Determination of the undrained shear strength in triaxial compression without measurement of pore pressure (definitive method)	BS 1377 : Part 7: 1990, Clause 8
	Determination of the consolidated-undrained shear strength in triaxial compression without measurement of pore pressure	BS 1377 : Part 8: 1990, Clause 1-7
	Determination of the consolidated-drained triaxial compression test with measurement of volume change	BS 1377 : Part 8: 1990, Clause 1-6, 8
Rock	Uniaxial compression strength of intact rock specimens	ASTM D7012-14, Method C
	Determination of the point load strength index of rock and application to rock strength classifications	ASTM D5371-16
	Laboratory determination of water (moisture) content if soil and rock by mass	ASTM D2216-19
Aggregates	Determination of Particle Size Distribution – Sieving Method	MS 30: Part 4: 1995 – Methods of Testing Aggregates: Part 4: Methods for Determination of Particles Size Distribution (First Revision) - Section One BS EN 933-1: 2012 – Tests for Geometrical Properties of Aggregates: Part 1: Determination of Particle Size Distribution – Sieving Method.
	Methods For Sampling	MS 30: Part 3: 1995 Clause 5 & 6

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Determination of Fine Content	BS EN 933-1: 2012 – Tests for Geometrical Properties of Aggregates: Part 1: Determination of Particle Size Distribution – Sieving Method.
	Determination of Particle Shape – Flakiness Index	MS 30: Part 5: 1995 - Methods of Testing Aggregates: Part 5: Methods for Determination of Particle Shape (First Revision) Section One: Flakiness Index
	Determination of Particle Shape – Elongation Index of Coarse Aggregate	MS 30: Part 5: 1995 - Methods of Testing Aggregates: Part 5: Methods for Determination of Particle Shape (First Revision) Section Two: Elongation Index of Coarse Aggregate
	Determination of Shell Content – Percentage of Shells in Coarse Aggregates	MS 30: Part 6: 1995 – Method of Testing Aggregates: Part 6: Method for Determination of Shell Content in Coarse Aggregate (First Revision).
	Determination of Potential Alkali Reactivity (Mortar-Bar Method)	ASTM C1260-14 - Potential Alkali Reactivity of Aggregates (Mortar - Bar Method).
	Determination of Aggregate Crushing Value (ACV)	MS 30: Part 8: 1995 - Methods of Testing Aggregates: Part 8: Methods for Determination of Aggregate Crushing Value (ACV) (First Revision).
	Determination of 10% Fines Value (TFV)	MS 30: Part 9: 1995 - Methods of Testing Aggregates: Part 9: Methods for Determination of Ten Percent Fines Value (First Revision). BS 812: Part 111: 1990 - Testing Aggregate: Part 111: Methods for Determination of Ten Per Cent Fines Value (TFV).

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SCOPE OF TESTING : Soil

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques