Issue Date: 17 November 2025
Valid Until: 18 February 2029

NO: SAMM 999
(Issue 2, 17 November 2025 replacement
of SAMM 999 dated 08 February 2024)

LABORATORY LOCATION/ CENTRAL OFFICE:	GEONAMICS (M) SDN. BHD. NO.6, LOT 25, JALAN UDANG HARIMAU 1 MEDAN NIAGA KEPONG 51200 KUALA LUMPUR MALAYSIA
ACCREDITED SINCE:	18 FEBRUARY 2021
FIELD OF TESTING:	MECHANICAL
FIELD OF CALIBRATION:	DIMENSIONAL

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).

*** The uncertainty covered by the CMC is expressed as the expanded uncertainty corresponding to a coverage probability of approximately 95 % and have a coverage factor of k=2 unless stated otherwise.**

CENTRAL LOCATION:	GEONAMICS (M) SDN. BHD. NO.6, LOT 25, JALAN UDANG HARIMAU 1 MEDAN NIAGA KEPONG 51200 KUALA LUMPUR
FIELD OF TESTING:	MECHANICAL

SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Aggregate	Determination of Loose Bulk Density and Voids for Aggregates	BS EN 1097-3
	Determination of Aggregate Crushing Value (ACV)	BS 812-110
	Determination of Ten Per Cent Fines Value (TFV)	BS 812-111

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SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Aggregate	Determination of Aggregate Impact Value (AIV)	BS 812-112
	Determination of Shell Content- Percentage of Shell in Coarse Aggregate	BS EN 993-7
	Determination of Clay Lumps and Friable Particles in Aggregates	ASTM C142/C142M
	Determination of Potential Presence of Humus (Organics Impurities)	BS EN 1744-1, Clause 15.1
	Determination of Particle Size Distribution: Sieving Method	BS EN 933-1
	Determination of Particle Density and Water Absorption	BS EN 1097-6
	Determination of pH Value	BS 1377-3, Clause 12
	Determination of Particle Shape-shape Index	BS EN 933-4
	Determination of Particle Shape- Flakiness Index	BS EN 933-3 BS 812-105.1
	Elongation Index	BS 812-105.2
	Soundness of Aggregate	ASTM C88/C88M
	Organic Impurities in Fine Aggregate for Concrete	ASTM C40/C40M
	Determination of the Water Content by Drying in a Ventilated Oven	BS EN 1097-5

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SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Soils	Determination of Water Content (Oven Drying Method)	BS 1377-2, Clause 4.1 BS EN ISO 17892-1 MS 1056: Part 2, Clause 4.2
	Determination of the Liquid Limit: Fall Cone Method	BS 1377-2, Clause 5.2 & 5.3 BS EN ISO 17892-12, Clause 5.3 MS 1056: Part 2, Clause 5.3 & 5.4
	Determination of the Plastic Limit and Plasticity Index	BS 1377-2, Clause 6 BS EN ISO 17892-12, Clause 5.5 MS 1056: Part 2, Clause 6
	Determination of Shrinkage Characteristics: Linear Shrinkage Method	BS 1377-2, Clause 7 MS 1056: Part 2, Clause 7.5
	Determination of Density: Linear Measurement Method	BS 1377-2, Clause 9 BS EN ISO 17892-2, Clause 5.1 MS 1056: Part 2, Clause 8.2
	Determination of Particle Density: Fluid Pycnometer Method	BS 1377-2, Clause 8 BS EN ISO 17892-3, Clause 5.1 MS 1056: Part 2, Clause 9.3 & 9.4
	Determination of Particle Size Distribution: Sieving, Hydrometer and Combined Tests	BS 1377-2, Clause 10 BS EN ISO 17892-4, Clause 5.2, 5.3 & 5.5 MS 1056: Part 2, Clause 10.2, 10.3 & 10.5
	Determination of Dry Density/ Water Content Relationship: 2.5 kg Rammer Method 4.5 kg Rammer Method Vibrating Hammer Method	BS 1377-2, Clause 11.3 & 11.4 Clause 11.5 & 11.6 Clause 11.7 MS 1056: Part 4 Clause 4.3 & 4.4 Clause 4.5 & 4.6 Clause 4.7

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SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Soils	Determination of California Bearing Ratio (CBR)	BS 1377-2, Clause 15 MS 1056: Part 4, Clause 8
	Consolidated Triaxial Compression Tests on Water Saturated Soils (CIU, CAU, CID, CAD)	BS EN ISO 17892: Part 9 MS 1056: Part 8
	Unconsolidated Undrained Triaxial Tests (UU)	BS EN ISO 17892: Part 8 MS 1056: Part 7, Clause 9
	Unconfined Compression Test (UCT)	BS EN ISO 17892: Part 7 MS 1056: Part 7, Clause 8.2
	Incremental Loading Oedometer Test	BS EN ISO 17892: Part 5 MS 1056: Part 5, Clause 4
Concrete	Compressive Strength of Test Specimens	BS EN 12390-3
	Density of Hardened Concrete	BS EN 12390-7
	Depth of Penetration of Water Under Pressure	BS EN 12390-8
	Cored Specimen- Taking, Examining and Testing in Compression	BS EN 12504-1
	Determination of Water Absorption	BS 1881-122
	Determination of Secant Modulus of Elasticity in Compression	BS EN 12390-13
	Determination of the Initial Surface Absorption of Concrete	BS 1881-208
	Flexural Strength of Test Specimens	BS EN 12390-5
	Tensile Splitting Strength of Test Specimen	BS EN 12390-6
	Determination of Rebound Number	BS EN 12504: Part 2

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SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Rocks	Unconfined Compressive Strength of Intact Rock Core Specimens	ASTM D7012, Method C
	Elastic Moduli of Intact Rock Core Specimen in Uniaxial Compression	ASTM D7012, Method D
	Determination of the Point Load Strength Index of Rock and Application to Rock Strength Classification	ASTM D5731
Bituminous Materials	Marshall Stability and Flow of Asphalt Mixtures	ASTM D6927
	Bulk Specific Gravity and Density of Non- Absorptive Compacted Asphalt Mixtures	ASTM D2726/D2726M
	Quantitative Extraction of Asphalt Binder from Asphalt Mixtures	ASTM D2172/D2172M (Method A- Centrifuge Extraction)
	Thickness of Height of Compacted Asphalt Mixtures	ASTM D3549/D3549M (Method A)
Metal & Metal Product (Steel Bar)	Tensile Properties	MS 146, Clause 7.3.3 MS ISO 6892-1 ISO 6892-1 MS ISO 15630-1 BS EN ISO 15630-1 BS 4449, Clause 7.2.3
	Bend Performance	BS EN ISO 15630-1
Metal & Metal Product (Weldable Reinforcing Steel)	Tensile Test Properties	BS 4449: Clause 7.2.3
	Bend Performance (Bend, Ageing & Re-bend Test)	MS 146, Clause 7.3.5 BS 4449, Clause 7.2.5
	Dimensions, Mass Per Meter and Tolerances	BS EN ISO 15630: Part 1, Clause 12 MS 146, Clause 7.4 BS 4449, Clause 7.3

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SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Metal & Metal Product (Steel Wire)	Tensile Test Properties	BS EN ISO 15630: Part 1, Clause 5 ISO 6892: Part 1 MS 144, Clause 7.2.3 BS 4482, Clause 7.2.3
	Bend Performance Test (Bend, Ageing & Re-bend Test)	BS EN ISO 15630: Part 1, Clause 6 & 7 MS 144, Clause 7.2.4 BS 4482, Clause 7.2.5
	Dimensions, Mass Per Meter and Tolerances	BS EN ISO 15630: Part 1, Clause 12 MS 144, Clause 7.3 BS 4482, Clause 7.3
Metal & Metal Product (Multi-Wire Steel Prestressing Strand)	Tensile Test	ASTM A1061/A1061M, Clause 9 BS EN ISO 15630: Part 3, Clause 5
Metal & Metal Product (Reinforcement Couplers for Mechanical Splices of Bars)	Tensile Test Properties	ISO 15835: Part 2, Clause 5.3
	Slip Test	ISO 15835: Part 2, Clause 5.4 BS 8110: Part 1. Clause 3.12.8.16.2
Welds and Welded Test Specimens (Welded Steel Fabric)	Tensile Properties	MS 145, Clause 8.1.3.1 MS ISO 15630-2 BS EN ISO 15630-2 MS ISO 6892-1 ISO 6892-1
	Bend Performance	MS 145, Clause 7.2.5 MS ISO 15630-2 BS EN ISO 15630-2
	Weld Shear Force	MS 145, Clause 7.2.4 MS ISO 15630-2 BS EN ISO 15630-2

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SCOPE OF CALIBRATION: DIMENSIONAL

Instrument Calibrated/ Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty(±)*	Remarks
Strain Transducer Sensitivity (Pile Dynamics, Inc models)	Up to 200 με/V	2.6 με/V	In-house method – "BDI Automated Strain Transducer Calibration System (ASTCS)". In House Method – Determination of Calibration Factor/Sensitivity for Strain Transducer (PDI Model)

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SITE LOCATION (HQ)	1. SITE 1
FIELD OF TESTING:	MECHANICAL

SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Soils	In-situ Density Tests: Sand Replacement Method Suitable for Fine and Medium Grained Soils (Small Pouring Cylinder Method)	BS 1377-9, Clause 2.1
	In-situ Density Tests: Sand Replacement Method Suitable for Fine and Medium Grained Soils (Medium Pouring Cylinder Method)	In-house method GEO/CMT/TM/06/014 with Reference to BS 1377-9
	In-situ Density Tests: Sand Replacement Method Suitable for Fine, Medium and Coarse-grained Soils (Large Pouring Cylinder Method)	BS 1377-9, Clause 2.2
	In-situ Density Tests: Core Cutter Method for Cohesive Soils Free from Coarse-Grained Material	BS 1377-9, Clause 2.4
	In-situ Vertical Deformation and Strength Tests: Determination of the In-situ California Bearing Ratio (CBR)	BS 1377-9, Clause 4.3
	Mackintosh Probe Test	In house test method GEO/CMT/06/01 with reference to JKR Specification
Other materials (Pile Testing)	Standard Test Method for High-Strain Dynamic Testing of Deep Foundations	ASTM D4945