Issue date: 25 September 2022
Valid Until: 02 October 2025

NO: SAMM 373
(Issue 1, 25 September 2022 replacement
of SAMM 373 dated 25 September 2022)

LABORATORY LOCATION/ CENTRAL OFFICE:	Testech Sdn Bhd 48, Jalan Perusahaan Jelutong 1, 11600 Pulau Pinang , 11600, PULAU PINANG MALAYSIA
ACCREDITED SINCE :	17 MARCH 2025
FIELD(S) OF TESTING:	MECHANICAL
FIELD(S) OF CALIBRATION:	DIMENSIONAL
SITE:	
1 . SITE LABORATORY(HQ) :	CATEGORY I
FIELD(S) OF TESTING :	MECHANICAL
2 . SITE LABORATORY(HQ) :	CATEGORY II
FIELD(S) OF TESTING :	MECHANICAL

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:	Testech Sdn Bhd 48, Jalan Perusahaan Jelutong 1, 11600 Pulau Pinang , 11600, Pulau Pinang
FIELD(S) OF TESTING :	MECHANICAL,

SCOPE OF TESTING : MECHANICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Hardened Concrete	Compressive Strength of Concrete Cube in the force range 0 kN to 3000 kN	MS 26: Part 2: 1991 Section 3

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Compressive Strength of Concrete Core in the force range 0 kN to 2000 kN	BS EN 12504-1: 2009 BS EN 12504-1: 2019 MS 26: Part 2: 1991
	Density of Hardened Concrete	BS EN 12390-7: 2019
	Rapid Chloride Permeability	AASHTO Designation: T 277-07 ASTM C 1202: 22
	Determination of water absorption of concrete	BS 1881: Part 122: 2011
	Determination of the Initial Surface Absorption of Concrete	BS 1881: Part 208: 1996
	Determination of Flexural Strength of Concrete	BS EN 12390-5: 2019
	Compressive Strength of Hardened Concrete in the force range of 0 kN to 3000 kN	BS EN 12390-3:2019
	Determination of Water Permeability of Concrete	DIN 1048: Part 5: June 1991
	Determination of drying shrinkage of concrete	BS ISO 1920-8:2009
	Determination the effect of aggregates on the drying shrinkage of concrete.	MS EN 1367-4:2012
	Static Modulus of Elasticity in Compression	BS ISO 1920-10: 2010 Clause 7.3
	Tensile Splitting Strength Test	BS EN 12390-6: 2009
	Carbonation Depth in Hardened Concrete by the Phenolphthalein Method	BS EN 14630: 2006
	Depth of Penetration of Water on Hardened Concrete	BS EN 12390-8: 2019
Sprayed Concrete	Compressive Strength of Sprayed Concrete	EFNARC 1996 Clause 10.2 EN 12504-1:2009
Resin Based Mortars	Compressive Strength of Resin Cube in the force range of 0 kN to 2000 kN	BS 6319: Part 2: 1983 Exclude Clause 5.1 & Clause 5.2
Mortar	Compressive Strength of Mortar Cube in the force range of 0 kN to 3000 kN	MS 522: Part 2: 2005 Clause 7.10 and Clause 7.11
Aggregates	Determination of Flakiness Index of Coarse Aggregates	BS 812: Section 105.1: 1989 MS 30: Part 5: 1995: Section 1 EN 933-3: 2012
	Determination of Elongation Index of Coarse Aggregates	BS 812: Section 105.2: 1990 MS 30: Part 5: 1995: Section 2
	Determination of Aggregate Crushing Value	BS 812: Part 110: 1990 MS 30: Part 8: 1995
	Determination of Ten Percent Fines Value	BS 812: Part 111: 1990 MS 30: Part 9: 1995

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Determination of Organic Impurities in Fine Aggregates for Concrete	ASTM C40/40M-20
	Clay Lumps and Friable Particles in Aggregates	ASTM C142/C142M-17
	Particle Size Distribution for Fine and Coarse Aggregates (Sieve Analysis)	BS 812: Part 103-1: 1985 MS 30: Part 4: 1995 EN 933-1: 2012
	Determination of Clay, Silt and Dust in Fine Coarse Aggregates	BS 812: Part 1: 1975: Clause 7.2.4 (Decantation method) MS 30: 1971: Section 3, Method B (Decantation method) ASTM C117-17
	Determination of Particle Densities and Water Absorption of Fine and Coarse Aggregate	BS 812: Part 2: 1995 Clause 5 MS 30: 1971: Section 4 BS EN 1097-6: 2013
	Shell Content	BS EN 933-7: 1998 BS 812: Part 106: 1985 MS 30: Part 6: 1995
Soil	Determination of Particle Size Distribution for Soils	BS 1377: Part 2: 1990 Clause 9
	Determination of Moisture Content	BS 1377: Part 2: 1990 Clause 3.2
	Determination of the Liquid Limit (Casagrande apparatus method)	BS 1377: Part 2: 1990 Clause 4.5
	Determination of the Plastic Limit and Plasticity Index	BS 1377: Part 2: 1990 Clause 5
	Determination of dry density/moisture content relationship (Rammer Method)	BS 1377: Part 4: 1990 Clause 3.3, 3.4, 3.5 & 3.6
	Determination of dry density/moisture content relationship (Vibrating Hammer Method)	BS 1377: Part 4: 1990 Clause 3.7
	Determination of soil density test	BS 1377: Part 2: 1990 Clause 7
Brick	Determination of compressive strength of masonry units	BS EN 772-1: 2015 + AI:2015 Clause 8
Metallic Materials	Bend Test	ISO 7438: 2016
	Tensile Test Force Range: 0 to 1000 kN	ISO 6892-1: 2019 Excluding site sampling
Welds In Metallic Materials	Transverse Tensile Test on Welds	ISO 4136:2012
Steel For The Reinforcement And Pre Stressing Of Concrete -pre Stressing Steel	Tensile Test	ISO 15630-3: 2019 Clause 5
Steel Wire For Reinforcement Of Concrete Products	Tensile Test Bend Performance Test	MS 144:2014 Clause 8.1.3.1 Clause8.1.3.2
Multi Wire Strand	Tensile Test	ASTM A1061/A1061M- 20 ASTM A370-13 Annex A7

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Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Mechanical Coupler	Tensile Test	ISO 6892-1: 2019 Excluding Site Sampling
	Tensile and Slip Test of Mechanical Splices of Bar	ISO 15835-2:2018 Clause 5.3 and 5.4
Steel For Reinforcement Of Concrete	Slip Test Tensile test	BS 8597: 2015 Clause 5.3 Clause 5.4
	Tensile and Bend Test of Plain Bars	ISO 6935-1:2007 Clause 8.1 & 8.2
	Tensile, Bend and Rebend Test of Ribbed Bars	ISO 6935-2: 2019 Clause 9.1, ,9.3, 9.4
Steel For Reinforcement Of Concrete -weldable Reinforcing Bar	Tensile Test Bend Performance Test	MS 146 : 2014 Clause 9
	Bend Test	MS 146 : 2006 Annex B 1.6.1
	Tensile Test, Bend and Rebend Test	BS EN 10080:2005 Clause 9
Weld Joints On Stainless Steel	Tension and Bend Test of Weld Joint on Stainless Steel	AWS D1.6/D1.6M: 2017 Clause 6.9.3.2 and 6.9.3.3
Reinforcement Bars, Wire Rod And Wire	Tensile Test Bend and Rebend Test	ASTM A370-13 Annex A9 ISO 15630-1:2019 Clause 5 ISO 15630-1:2019 Clause 6 & 7
Steel Fabric For The Reinforcement Of Concrete	Shear force of Welded joint Tensile Test Bend Performance Test	MS 145: 2014 Clause 7.2.4 Clause 7.2.3 Clause 7.2.5
	Tensile Test Bend Test on Welded Intersection Weld Shear Force Geometrical Characteristics on the Fabric	ISO 15630-2: 2019 Clause 5 Clause 6 Clause 7 Clause 10

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

SCOPE OF TESTING : MECHANICAL

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Filling Materials (soil)	Field Density (Sand Replacement Method)	BS 1377: Part 9: 1990: Clause 2.1 and Clause 2.2 ASTM D 1556: 15
	In-situ CBR	BS 1377: Part 9: 1990 Clause 4.3
	Determination of Penetration Resistance Using the JKR Probe (60° Cone)	In house Method Doc. No: TP121-1 Rev. 0 (JKR Specification)
Ground Anchorages	Pull out Load and Displacement Measurement	BS 8081: 1989 Clause 11.2.4, 11.2.5 & 11.2.7
Fresh Concrete	Concrete Air Content (Pressure Gauge Method)	BS EN 12350-7: 2019
	Concrete Bleeding	ASTM C232/ C232M- 21
	Concrete Setting Times	ASTM C403/ C403M- 16

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SITE LOCATION (HQ)	2. CATEGORY II
FIELD(S) OF TESTING :	MECHANICAL

SCOPE OF TESTING : MECHANICAL

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Bituminous Pavement	Thickness or height of compacted bituminous pavement	ASTM D3549/D3549M-18
	Thickness or height of compacted bituminous pavement	BS EN 12697-36: 2003
Hardened Concrete	Rebound Hammer Test	BS EN 12504-2: 2021

CENTRAL LOCATION	Testech Sdn Bhd 48, Jalan Perusahaan Jelutong 1, 11600 Pulau Pinang , 11600, Pulau Pinang
FIELD(S) OF CALIBRATION :	DIMENSIONAL,

SCOPE OF CALIBRATION : DIMENSIONAL

Instrument Calibrated/Measurement Parameter	**Range**	**Calibration and Measurement Capability Expressed as an Uncertainty (±)***	**Remarks**
Test Sieves Of Perforated Metal Plate	4 mm to 10 mm	0.05 mm	Calibrated by using digital Vernier caliper with reference to ISO 3310-2: 2013
	10 mm to 25 mm	0.06 mm	Calibrated by using digital Vernier caliper with reference to ISO 3310-2: 2013
	25 mm to 75 mm	0.12 mm	Calibrated by using digital Vernier caliper with reference to ISO 3310-2: 2013
	75 mm to 125 mm	0.12 mm	Calibrated by using digital Vernier caliper with reference to ISO 3310-2: 2013