

# Schedule

Issue date: 06 October 2023  
Valid until: 28 October 2028



NO: SAMM 853

Page: 1 of 7

**LABORATORY LOCATION:**  
(PERMANENT LABORATORY)



**NATTEST LAB SDN. BHD.**  
**NO. 16, JALAN 5/108C**  
**TAMAN SUNGAI BESI**  
**57100 KUALA LUMPUR**  
**MALAYSIA**

**FIELD 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).

## SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Concrete	Compressive Strength of Concrete Cube	BS EN 12390-3: 2009 / BS EN 12390-3: 2019
	Compressive Strength of Concrete Core	BS EN 12504-1: 2009 / BS EN 12504-1: 2019
	Determination of Water Absorption	BS 1881-122: 2011 + A1:2020
Aggregate	Sieve Test	BS 812-103.1: 1985 MS 30: Part 4: Section 1: 1995 BS EN 933-1: 2012
	Ten Percent Fines Value	BS 812-111: 1990 MS30: Part 9: 1995
	Aggregate Impact Value	BS 812-112: 1990 MS 30: Part 10: 1995
	Aggregate Crushing Value	BS 812-110: 1990 MS 30: Part 8: 1995

## Signatories:

1. **Ahmad Zaki Sabar**
2. **Mohamad Fazley Ros Laily**
3. **\*Muhamad Wahizan Mohd Radzi**
4. **Zafira Adila Mohd Yusof**
5. **Maizatuakmar Mohd Jahuary**

\*Note: Non-resident signatory

NO: SAMM 853

Page: 2 of 7

## SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Concrete	Determination of depth of penetration of water under pressure	BS EN 12390-8: 2019
	Determination of Initial Surface Absorption of Concrete (ISAT)	BS 1881: Part 208: 1996
	Determination of density of hardened concrete	BS EN 12390-7: 2019
Aggregate/Crusher Run	Determination of Materials Finer than 75 µm by washing	MS 30: 1971 BS 812: 103.1: 1985
	Determination of Flakiness Index	BS 812: Part 105.1: 1989 MS 30: Part 5: 1995
	Determination of Flakiness Index	BS EN 933-3: (2012)
	Determination of Elongation Index	BS 812: 105.2: 1990
	Determination of Particle Density & Water Absorption (Coarse)	BS 812: Part 2: 1995 Clause 5.3
	Determination of Particle Density & Water Absorption (Fine)	BS 812: Part 2: 1995 Clause 5.5
	Determination of Soundness (5 Cycle)	ASTM C 88_C88M-18 / AASHTO T 104
	Determination of Los Angeles Abrasion Value (LA)	ASTM C131_C131M-20
	Determination of Resistance to Fragmentation by Los Angeles (LA)	BS EN 1097-2: 2020
	Organic Impurities in Fine Aggregate for Concrete	ASTM C40_C40M-20
	Geometrical Properties of Aggregate Assessment of Fines Sand Equivalent Test	BS EN 933-8: 2015
	Geometrical Properties of Aggregate Assessment of Fines Methylene Blue	BS EN 933-9: 2013
	Determination of Clay Lumps & Friable Particles in Aggregate	ASTM C142 / C 142M-17

Scan this QR Code or visit [www.ism.gov.my/cab-directories](http://www.ism.gov.my/cab-directories) for the current scope of accreditation

# Schedule

Issue date: 06 October 2023  
Valid until: 28 October 2028



NO: SAMM 853

Page: 3 of 7

## SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Premix	Determination of Bitumen Content & Particle Size Distribution  Determination of Density & Compaction Bituminous Mixtures  Determination of Marshall Stability & Flow Values of Bituminous Mixtures  Determination of Thickness or Height Compacted Bituminous Paving Mixtures Specimen	ASTM D 2172_D217M-17 / MS 30: Part 4: 1995 Section 1 (Dry Method)  ASTM D2726/ D2726M-21  ASTM D 2726 / D2726M-21 / ASTM D1559-76 / AST D6927-22 / ASTM 6926-20  ASTM D3549_D3549M-18
Bitumen	Determination of Bitumen Quality: - Penetration @ 25°C, 100 g, 5 sec - Softening Point - Flash Point (Cleveland)	ASTM D 5 / D 5M-20 ASTM D 36 / D36M-14 (Re-approved 2020) ASTM D 92 -18
Reinforcing Bar & Welded Steel Fabric	Tensile Test on Steel Bar  Bend Test on Steel Bar  Re-bend Test on Steel Bar	MS 145: 2014 /MS 146: 2014 / ISO 6892-1: 2016 / MS ISO 15630-1: 2012 / BS EN ISO 6892-1: 2019 (Method B)  MS ISO 7438: 2017 / MS 146: 2014 / MS 145: 2014  MS 146: 2014 / MS 144: 2014 / MS 145: 2014
Welded Steel Fabric	Determination of Weld Strength of Steel Fabric	MS 145: 2014
Metallic Material (including Coupler)	Tensile Test on Coupler	BS EN ISO 6892-1: 2019 (Method B) ISO 6892-1: 2016 (Method B)
Multi-Wire Strand for the Pre-stressing of Concrete	Determination of Tensile Strength on PC Strand	ASTM A1061 / A1061M: 20AE01 Clause 9.0 / BS 5896: 2012 Clause 7.2 & 9.0 / MS ISO 15630: Part 3: 2009 / MS 1138: Part 4: 2020 Clause 6.0

Scan this QR Code or visit [www.ism.gov.my/cab-directories](http://www.ism.gov.my/cab-directories) for the current scope of accreditation

NO: SAMM 853

Page: 4 of 7

**SCOPE OF TESTING: MECHANICAL**

<b>Materials/ Products Tested</b>	<b>Type of Test/ Properties Measured/ Range of Measurement</b>	<b>Standard Test Methods/ Equipment/Techniques</b>
Brickwork (Clay & Sand)	Determination of Compressive Strength on Masonry Unit	BS EN 772-1: 2011+A1: 2015 / MS 76: 1972: Clause 10 Table 6
Rock Core	Determination of Axial Point Load Strength  Determination of Unconfined Compressive Strength of Rock Core	ASTM D 5731-16  ASTM D 7012 – 14E01 (Method C)

**Signatories:**

1. **Ahmad Zaki Sabar**
2. **Mohamad Fazley Ros Laily**
3. **\*Muhamad Wahizan Mohd Radzi**

\*Note: Non-resident signatory

# Schedule

Issue date: 06 October 2023  
Valid until: 28 October 2028



NO: SAMM 853

Page: 5 of 7

**LABORATORY LOCATION:**  
(BRANCH LABORATORY)



**NATTEST LAB SDN. BHD.**  
**NO. 20, JALAN IMPIAN EMAS 7**  
**TAMAN IMPIAN EMAS**  
**81300 SKUDAI**  
**JOHOR**  
**MALAYSIA**

**FIELD 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).

## SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Concrete	Compressive Strength of Concrete Cube	BS EN 12390-3: 2009 / BS EN 12390-3: 2019
	Compressive Strength of Concrete Core	BS EN 12504-1: 2009 / BS EN 12504-1: 2019
	Determination of Water Absorption	BS 1881-122: 2011
	Determination of Depth of Penetration of Water Under Pressure	BS EN 12390-8: 2009 / BS EN 12390-8: 2019
	Determination of Density of Hardened Concrete	BS EN 12390-7: 2009 / BS EN 12390-7: 2019
Aggregate/Crusher Run	Sieve Test	BS 812-103-1: 1985 MS 30: Part 4: Section 1: 1995 BS EN 933-1:2012
	Ten Percent Fines Value	BS 812-111: 1990 MS 30: Part 9: 1995
	Aggregate Impact Value	BS 812-112: 1990 MS 30: Part 10: 1995
	Aggregate Crushing Value	BS 812-110: 1990 MS 30: Part 8: 1995

Scan this QR Code or visit [www.ism.gov.my/cab-directories](http://www.ism.gov.my/cab-directories) for the current scope of accreditation

NO: SAMM 853

Page: 6 of 7

## SCOPE OF TESTING: MECHANICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Aggregate/Crusher Run	Determination of Materials Finer than 75 µm by Washing	MS 30: 1971 BS 812: Part 103.1: 1985
	Determination of Flakiness Index	BS 812: Part 105.1: 1989 MS 30: Part 5: 1995
	Determination of Flakiness Index	BS EN 933-3 (2012)
	Determination of Elongation Index	BS 812: Part 105.2: 1990
	Determination of Particle Density & Water Absorption (Coarse)	BS 812: Part 2: 1995 Clause 5.3
	Determination of Particle Density & Water Absorption (Fine)	BS 812: Part 2: 1995 Clause 5.5
	Determination of Los Angeles Abrasion Value (LA)	ASTM C 131 / C 131M: 2014 / ASTM C131_C131M-20
Aggregate/Crusher Run	Determination of Resistance to Fragmentation by Los Angeles (LA)	BS EN 1097-2: 1998 / BS EN 1097-2: 2020
	Organic Impurities in Fine Aggregate for Concrete	ASTM C40: 2004 / ASTM C40_C40M-20
	Determination of Clay Lumps & Friable Particles in Aggregate	ASTM C142 / C 142M-17
Premix	Determination of Bitumen Content & Particle Size Distribution	ASTM D2172_D2172M-17 MS 30 Part 4 1995
	Determination of Density & Compaction Bituminous Mixtures	ASTM D2726_D2726M-21
	Determination of Marshall Stability & Flow Values of Bituminous Mixtures	ASTM D2726_D2726M-21 / ASTM D1559-76 / ASTM D6927-22 / ASTM 6926-20
	Determination of Thickness or Height Compacted Bituminous Paving Mixtures Specimen	ASTM D3549_D3549M-18

Scan this QR Code or visit [www.ism.gov.my/cab-directories](http://www.ism.gov.my/cab-directories) for the current scope of accreditation

NO: SAMM 853

Page: 7 of 7

**SCOPE OF TESTING: MECHANICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Reinforcing Bar & Welded Steel Fabric	Tensile Test on Steel Bar - Yield Strength - Tensile Strength - % Elongation  Bend Test on Steel Bar  Re-bend Test on Steel Bar	MS 145: 2014 / MS 146: 2014 ISO 6892-1: 2019 (Method B) / MS ISO 15630-1: 2012 / BS EN ISO 6892-1: 2019 (Method B)  MS ISO 7438: 2017 / MS 146: 2014 / MS 145: 2014  MS 146: 2014 / MS 144: 2014 MS 145: 2014
Welded Steel Fabric	Determination of Weld Strength of Steel Fabric	MS 145: 2014
Metallic Material (Including Coupler)	Tensile Test on Coupler - Tensile Strength	BS EN ISO 6892-1: 2019 (Method B) / ISO 6892-1: 2019 (Method B)
Brickwork (Clay & Sand)	Determination of Compressive Strength on Masonry Unit	MS 76: 1972: Clause 10 Table 6
Rock Core	Determination of Axial Point Load Strength  Determination of Unconfined Compressive Strength of Rock Core	ASTM D5731-16 / ISRM  ASTM D 7012 – 14E01 (Method C)

**Signatories:**

1. **Muhamad Wahizan bin Mohd Radzi**
2. **Mohmad Saharil bin Wagiyu**