Issue date: 26 March 2025
Valid Until: -

NO: SAMM 347

LABORATORY LOCATION/ CENTRAL OFFICE:	Material Testing Laboratory, IKRAM QA Services Sdn Bhd Blok 7, Unipark Suria Jalan Ikram-Uniten 43000 Kajang, Selangor , 43000, SELANGOR MALAYSIA
ACCREDITED SINCE :	26 MARCH 2025
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).

CENTRAL LOCATION:	Material Testing Laboratory, IKRAM QA Services Sdn Bhd Blok 7, Unipark Suria Jalan Ikram-Uniten 43000 Kajang, Selangor , 43000, Selangor
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**
Aggregate	Determination of elongation	MS 30: Part 5: 1995
	Particle Size Distribution	BS EN 933-1: 2012
	Particle Size Distribution (Sieve Analysis)	MS 30: Part 4: 1995 BS EN 933-1:2012 /
	Soundness of Aggregates by use	ASTM C88-18 clause 6.1.2
	Determination of Particle Size	In-House Method CML-SOPT-02
	Determination the Resistance to	AASHTO T96-02(2019) and ASTM
	Determination of Water -	Clause 7
	Sieve Test	BS 812-103.1: 1985
	Determination of water soluble chloride salts	BS 812 : Part 117 :1988

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
	Determination of sulphate content	BS 812 : Part 118 :1988 (Gravimetric)
	a) Determination of Particle Size Distribution of Fine and Coarse	MS 30: Part 4 : 1995 MS EN 933-1 : 2011
	Determination of Aggregate	BS 812: Part 110: 1990
	Determination of the aggregate	BS 812: Part 110: 1990
	Determination of the aggregate	BS 812: Part 110:1990
	*-œDetermination of Loose BulkBS EN 1097-3:1998 *-œDetermination of Loose Bulk	*-œDetermination of Loose Bulk
Ater Closet Flushing Cisterns Part 1:specification	Materials	None
	Ceramic ware cisterns	None
	Plastic Cistern	None
Ceramic Tiles -" Definitions, Classification, Characteristics And Marking	Requirements	MS ISO 13006::2014 Clause 7
	i. Determination of water	MS ISO 10545-3: 2018
Ceramic Wash Basin	Quality	MS 2578: 2014, Amd. 1: 2017 Clause 4.1
	Dimension	Clause 4.2
	Strength and support test	Clause 4.3
	Draining of water	Clause 4.4
	Marking	Clause 5
Clay Bricks	Determination of compressive strength Water absorption	MS 76: 1972 (Only for clause 39 and 40)
	Determination of compressive strength	MS 1933: Part 1: 2007
	Determination of water	BS EN 772-21: 2011
Concreteproducts	None	MS ISO 15630-1:2012
Coupler Bar	Tensile Test	BS EN ISO 6892-1: 2019 (Method
	Tensile Strength Test	BS EN ISO 6892-1: 2019 /
Hardened Concrete	Density based on weight	MS EN 12390-7:2012
	Concrete Cube Compressive	BS EN 12390-3:2019
	Compressive Strength of	BS EN 12390-3: 2019
	Compressive Strength of	BS EN 12390-3: 2019
	Compressive Strength of	BS EN 12390-1: 2019
	Compressive Strength of Concrete Cube/Cylinder	BS EN 12390-3: 2019
	Compressive Strength of Concrete Core	BS EN 12504-1: 2019
	Flexural strength	BS EN 12390-5:2019
	Tensile splitting strength	BS EN 12390-6:2009
	Density	BS EN 12390-7:2019
	Depth of penetration of water under pressure	BS EN 12390-8:2019
	Determination of secant modulus of elasticity in compression	BS EN 12390-13:2013

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Electrical indication of concrete-™s ability to resist chloride ion penetration (RCPT)	ASTM C1202:2019
	Initial Surface Absorption Test (ISAT)	BS 1881: Part 208:1996
	Determination of Chloride	Clause 12.1
	Compressive Strength (Up to 3000kN)	BS EN 12390-3:2019
	Compressive Strength (Up to 3000kN)	MS EN 12390-3:2012
	Density	BS EN 12390-7:2019
	Compressive Strength of Cubes	BS EN 12390-3:2019
	Compressive Strength of Concrete	BS EN 12390-3: 2019
	Compressive strength of	MS EN 12390-3:2012
	Compressive Strength of	MS EN 12390-3:2012
	Compressive Strength of	BS EN 12504-1:2019
	Compressive Strength of	MS EN 12390-3:2012
	Compressive Strength of Concrete	MS EN 12504 : Part 1 : 2013
	Compressive Strength of Test	BS EN 12390-3: 2019
	Compressive Strength of	BS EN 12390-3: 2019
	Compressive Strength of Concrete Cube	BS EN 12390-3:2009 MS EN 12390-3:2012
	Compressive Strength of Concrete Cube (0-2000 kN)	BS EN 12390-3:2009
	Density of Hardened Concrete	BS EN 12390-7:2009
	Surface Hardness Test by	BS EN 12504-2:2012
	Compressive Strength of	BS EN 12390-3: 2019
	Compressive Strength Test (Cubes, Cores & Cylinders)	BS EN 12390-3: 2019 (Test at ambient conditions)
	Surface Hardeness Testing by	BS EN 12504 -” 2: 2021
	Compressive Strength Test (Cubes, Cores & Cylinders)	BS EN 12390-3: 2019 (Test at ambient conditions)
	Surface Hardeness Testing by	BS EN 12504 -” 2: 2021
	Compressive Strength of Concrete Cube & Cylinder in the force range of OKN to	BS EN 12390-3:2009 MS EN 12390-3:2012
	Compressive Strength of Concrete Core in the force range of OKN to 3000kN	BS EN 12504-1:2009 MS EN 12504-1:2013
	Determination of Density	BS EN 12390-7:2009
	Determination of Density, Absorption and Voids	ASTM C 642:13
	Initial Surface Absorption	BS 1881 Part 208: 1996
	Rapid Chloride Permeability	AASHTO Designation T277:15
	7. Water Permeability	DIN 1048 Part 5: June 1991
	8. Static Modulus of Elasticity in	ISO 1920 Part 10: 2010
	Penetration Resistance in the	ASTM C 803/C 803M -18
	Compressive Strength of	None

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Rebound Hammer Test	BS EN 12504-2: 2021
	Compressive Strength of	MS EN 12390-3:2012
	Compressive Strength of Concrete Cube in the force range of 0 kN to 3000 kN	MS EN 12390-3:2012 BS EN 12390-3:2019
	Compressive Strength of	MS EN 12390-3: 2012
	Concrete Cube	(curing on specimens performed by
	Concrete Cube	customer)
	Compressive Strenght of Cubes	Test instruction reference to BS EN
Metallic Materials	Tensile testing for metallic	BS EN ISO 6892-1: 2019 (Method B)
	Tensile Test ambient at	BS EN ISO 6892-1: 2019 (Method B)
	Chemical Analysi:	JIS G 1253: 2013
	Tensile Test	ASTM E8/E8M/-21
	Tension	ASTM E8/E8M-16a
	Tensile properties	MS ISO 15630-1:2012
	Microindentation Vickers	ASTM E384-17
	Determination of Tensile	BS EN ISO 6892-1: 2016
	Tensile Testing	E8/E8M-2021
	Metallographic Test i) Sample preparation	ASTM E3-11 (2017)
	None	ASTM E3-11 (2017)
	Tensile test at ambient	ASTM A370-21
	Tensile test at ambient	ASTM A370-21
	Tensile Testing	E8/E8M-2021
	Tensile test at ambient temperature	ASTM A370-2020 ASTM E8-2016
	None	JIS Z2248:2006
	None	None
	Metallography	None
	None	In house developed procedure
	Bend Test	ISO 7438: 2016
	Tensile Test Force Range: 0 to 1000 kN	ISO 6892-1: 2019 Excluding site sampling
	Elemental Analysis	ASTM E1251: 17a
Quality Of Vitreous China Sanitary Appliances	Quality of Glazing	None
	Tolerances	None
	Visual Examination	None
	Water Absorption	None
Reinforcement Of	None	B
	Tensile Test	Clause 8.1.3.1
Reinforcement Of Concrete	None	B
	None	None
	None	None
	Tensile Test e	Clause 7.2.3 e

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Sanitary Tapware	Marking	BS EN 200:2008- Cl. 4.1
	Leak tightness characteristics	BS EN 200:2008- Cl. 8
	Pressure resistance characteristics	BS EN 200:2008-Cl. 9
	Hydraulic characteristics	BS EN 200:2008-Cl. 10
	None	None
	None	None
Steel Fabric For The	Tensile Test	BS EN ISO 6892-1: 2019 (Method
Steel For The Reinforcement Of Concrete	Determination of sizes, cross-sectional area and mass	MS 146: 2014
	Determination of sizes, cross-sectional area and mass	Clause 7.4.1
	Tensile properties (yield, tensile	Clause 7.3.3
Steel Wire For The	Tensile Test	BS EN ISO 6892-1: 2019 (Method
	None	MS 144:2014
Vitreous China Water Closet Pans - Specification	Quality	MS 1522: 2015 Clause 4.1
	Water Seal	Clause 4.2
	Construction	Clause 4.3
	Dimension	Clause 4.4
	Grouping	Clause 4.5
	Colour	Clause 4.6
	Flushing volume	Clause 4.7
	Flushing Test	Clause 4.8
	Loading Test	Clause 4.9
	Additional requirements for one-piece WC pan	Clause 4.10
	Additional requirements forHybrid WC pan	Clause 4.11
	Marking	Clause 6
Water Closet Flushing Cisterns - Part 3: Flushing Device	Materials	MS 795-3: 2019 Clause 4
	General	Clause 5.1
	Watertight joint	Clause 5.2
	Discharge volume	Clause 5.3
	Rate of Discharge	Clause 5.4
	Physical Endurance	Clause 5.5
	Chemical Endurance	Clause 5.6
	Valve Mechanism	Clause 5.7
	Workmanship	Clause 6
	Marking	Clause 8
Water Closet Flushing Cisterns -part 2: Inlet Valves	Materials	MS 795-2: 2019 Clause 4
	Physical Endurance	Clause 5.1
	Chemical Endurance	Clause 5.2
	Back Siphonage	Clause 5.3
	Valve Mechanism	Clause 5.4
	Inlet Connection	Clause 5.5
	Workmanship	Clause 6
	Marking	Clause 8

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