


Schedule

Issue date: 03 August 2023
Valid Until: 21 August 2028



NO: SAMM 079

Page: 1 of 3

LABORATORY LOCATION/ CENTRAL OFFICE:	Ceramic Research Company (M) Sdn Bhd Lot 7110, 5th Miles Jalan Kapar 42100 Klang, Selangor , 42100, SELANGOR MALAYSIA
	
ACCREDITED SINCE :	03 AUGUST 2023
FIELD(S) OF TESTING:	CHEMICAL 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:	Ceramic Research Company (M) Sdn Bhd Lot 7110, 5th Miles Jalan Kapar 42100 Klang, Selangor , 42100, 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
1. Ceramic Raw Materials(e.g. Clay, Stone, Minerals,body/ Glaze Formula Etc.)	2. Loss-On-Ignition (at temperature 1025 °C ± 25 °C)	In-house Test Method: TM22
	1. SiO ₂ , Al ₂ O ₃ , TiO ₂ , Fe ₂ O ₃ , Na ₂ O, K ₂ O, CaO, MgO, P ₂ O ₅ , MnO, Cr ₂ O ₃ , ZrO ₂ , HfO ₂ , SO ₃ , SrO	In-house Test Method: TM22 XRF Technique

SCOPE OF TESTING : MECHANICAL

Schedule

Issue date: 03 August 2023
Valid Until: 21 August 2028



NO: SAMM 079

Page: 2 of 3

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
1. Ceramic Raw Materials(e.g. Clay, Stone, Minerals,body/ Glaze Formula Etc.)	1. Weight Loss at temperature of 900 °C to 1000 °C	In-house Test Method: TM1 (Loss-On-Ignition Technique)
	2. Particle Size Distribution Size range: 37 µm to 103 µm	In-house Test Method: TM2 (Particle Size Analyser using Laser Light Diffraction Technique)
	3. Moisture Content	In-house Test Method: TM8
	4. Residue Content in Clayey Material	In-house Test Method: TM9
	5. Fired Shrinkage and Weight Loss	In-house Test Method: TM11
	6. Specific Gravity	In-house Test Method: TM14
2. Fired Ceramic Raw Materials, Body/glaze And Engobe, Etc.	1. Coefficient of Expansion	In-house Test Method: TM3 (Dilatometer)
	2. Water Absorption	In-house Test Method: TM12
	3. Fired Colour	In-house Test Method: TM13
3. Ceramic Tiles	1. Dimension and Surface Quality	ISO 10545 Part 2:2018 MS ISO 10545 Part 2:2002
	2. Water absorption	ISO 10545 Part 3:2018 MS ISO 10545 Part 3:2001
	3. Modulus of Rupture and Breaking Strength	ISO 10545 Part 4:2019 MS ISO 10545 Part 4:2003 ASTM C1505-15 (reapproved 2022)
	4. Resistance to Deep Abrasion – Unglazed Tiles	ISO 10545 Part 6:2010 MS ISO 10545 Part 6:201
	5. Resistance to Surface Abrasion – Glazed Tiles	ISO 10545 Part 7:1996 MS ISO 10545 Part 7:2001 ASTM C1027-19
	6. Linear Thermal Expansion	ISO 10545 Part 8:2014 MS ISO 10545 Part 8:2001
	7. Moisture Expansion	ISO 10545 Part 10:2021 MS ISO 10545 Part 10:2002
	8. Crazing Resistance	ISO 10545 Part 11:1994 MS ISO 10545 Part 11:2
	9. Chemical Resistance	ISO 10545 Part 13:2016 MS ISO 10545 Part 13:2001
	10. Stain Resistance	ISO 10545 Part 14:2015 MS ISO 10545 Part 14:2001
3. Ceramic Tiles (continued)	11. Slip Resistance of Pedestrian Surfaces	AS 4586:2013 Appendix B
	12. Slip Resistance Classification of new pedestrian surface materials	AS 4586:2013 (Amdt 1/2017) Appendix D (Oil-wet ramp test method) Equipment: Inclined ramp machine
	13. Slip Resistance – Wet Pendulum Test	AS/NZS 4586:2013 Appendix A Equipment: Pendulum tester
	14. Water Absorption	ASTM C373-18

Schedule

Issue date: 03 August 2023
Valid Until: 21 August 2028



NO: SAMM 079

Page: 3 of 3

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	15. Small colour Differences between Ceramic Wall or Floor Tile	ASTM C609-20
	16. Resistance of Ceramic Tile to Chemical Substances (Qualitative test only)	ASTM C650-20
	17. Specular Gloss of Glazed Ceramic Whitewares and Related Products	ASTM C584-81 (2016)

Scan this QR Code or visit <https://accreditation.ism.gov.my/public/listing/cab/samm-ct/3001369> for the current scope of accreditation