SINGAPORE LABORATORY ACCREDITATION SCHEME

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Schedule

Admaterials Technologies Pte Ltd
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FIELD OF TESTING : Civil Engineering Testing

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
A. AGGREGATE	1. Petrographic Examination of Aggregates for Concrete	BS EN 932-3:1997 BS 7943:1999 BS 812-104:1994 ASTM C295/C295M-19	SW, JAA
	2. Potential Alkali Reactivity (Mortar Bar Method)	ASTM C1260-21	
	3. Particle Size Distribution / Sieve Analysis	SS 73:1974 ASTM C136/C136M-19 BS 812-103.1:1985 BS EN 933-1:2012 ASTM D546-17 (ASTM D242/D242M-19)	SW, MAT
	4. Fineness Modulus	ASTM C136/C136M-19	
	5. Clay, Silt and Dust (Decantation Method)	SS 73:1974 (Except Method A) BS 812-103.1:1985 ASTM C117-17 BS EN 933-1:2012	
	6. Moisture Content (Oven Dried Method)	SS 73:1974 BS 812-109:1990 BS EN 1097-5:2008	
	7. Bulk Density	BS EN 1097-3:1998 BS 812-2:1995 SS 73:1974	SW, MAT
	8. Relative Density & Water Absorption	BS EN 1097-6:2022 BS 812-2:1995 SS 73:1974 ASTM C127-15 ASTM C128-15 (Gravimetric Method)	

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A. AGGREGATE	9. Sampling	BS EN 932-1:1997 BS 812-2:1989 SS 73:1974	SW
	10. Organic Impurities	ASTM C40/C40M-20 SS 73:1974	SW, MAT
	11. Shell Content	SS 73 Part 6:1992 BS 812-106:1985 BS EN 933-7:1998	
	12. Flakiness Index	SS 73 Part 5.1:1992 BS EN 933-3:2012 BS 812-105.1:1989	
	13. Elongation Index	SS 73:1974 BS 812-105.2:1990	
	14. Impact Value	SS 73: 1974 BS 812-112:1990	
	15. Crushing Value	SS 73: 1974 BS 812-110:1990	
	16. 10% Fines Value	SS 73: 1974 BS 812-111:1990	
	17. Los Angeles Abrasion	SS 73: 1974 ASTM C131/C131M-20 BS EN 1097-2:2020 ASTM C535-16	
	18. Soundness Test	ASTM C88/C88M-18 BS 812-121:1989 BS EN 1367-2:2009 SS 73 Part 21:1992	
	19. Shape & Surface Texture	SS 73: 1974	
	20. Drying Shrinkage	SS 73 Part 20:1992 BS EN 1367-4:2008 BS 812-120:1995	
	21. Assessment of Fines - Methylene Blue Test	BS EN 933-9:2022	SW, MAT

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
A. AGGREGATE	22. Shape Index	BS EN 933-4:2008	SW, MAT
	23. Angularity Number	SS 73:1974	
	24. Assessment of Fines - Sand Equivalent Test	BS EN 933-8:2012+A1:2015 ASTM D2419-14	SW, MAT
	25. Constituents of Coarse Recycled Aggregates	BS EN 933-11:2009 SS 544: Part 2:2019	SW
	26. Organic Contaminators by Mortar Method	BS EN 1744-1:2009+A1:2012, Clause 15.3	
	27. Coral Content (Shell content in fine aggregate)	SANS 5840:2008	SW, MAT
	28. Aggregate Abrasion Value	BS 812-113:1990 BS EN 1097-8:2020	SW
	29. Influence of Recycled Aggregate Extract on the Initial Setting Time of Cement	BS EN 1744-6:2006	
	30. Percentage of Fractured Particles in Coarse Aggregate	ASTM D5821-13(2017)	
	31. Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	ASTM D4791-19	
	32. Clay Lumps and Friable Particles in Aggregates	ASTM C142/C142M-17	
	33. Polished Stone Value	BS EN 1097-8:2020 BS 812-114:1989	
	34. Lightweight Particles in Aggregate	ASTM C123/C123M-14	SW, MAT
	35. Particle Density of Filler	BS EN 1097-7:2008	

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B. SOIL	1. Direct Shear Box Test	BS 1377-7:1990 (Clause 4.5.4) BS EN ISO 17892-10:2018	) SW, MAT)
	2. Compaction Test (Maximum and Minimum Dry Density)	BS 1377-4:1990 (Clause 4)	)
	3. Compaction Test (Dry Density /Moisture Content)	BS 1377-4:1990 (Clause 3) ASTM D1557-12(2021) ASTM D698-12(2021) AASHTO T180-21 AASHTO T99-21	)))))
	4. Unconfined Compressive Strength	BS 1377-7:1990 (Section 7) ASTM D2166/D2166M-16 BS EN ISO 17892-7:2018	)))
	5. Moisture Content	BS 1377-2:2022 BS EN ISO 17892-1:2014 ASTM D2216-19 ASTM D4944-18 ASTM D4959-16 ASTM D4643-17	))))))
	6. Liquid Limit	BS 1377-2:2022, Section 5 ASTM D4318-17e1 ISO 17892-12:2018 +A1:2021 +A2:2022 BS EN ISO 17892 12:2018 +A1:2021	))))
	7. Plastic Limit & Plasticity Index	BS 1377-2:2022, Section 6 ASTM D4318-17e1 ISO 17892-12:2018 +A1:2021 +A2:2022 BS EN ISO 17892-12: 2018 +A1: 2021	))))
	8. Linear Shrinkage	BS 1377-2:2022, Section 7	))
	9. Particle Size Distribution	BS 1377-2:2022, Section 10 Method 9.2, 9.3 & 9.5 BS EN ISO 17892-4:2016	)))
	10. California Bearing Ratio	BS 1377-4:1990, Method 7 ASTM D1883-21	))

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B. SOIL	11. Particle Density	BS 1377-2:2022, Section 9 BS EN ISO 17892-3:2015	SW, MAT
	12. Percentage of Fines (Finer than 75micron)	ASTM D1140-17	
	13. Sand Replacement	BS 1377-9:1990, Method 2.1 & 2.2 ASTM D1556/D1556M-15ε1 & ASTM D4944-18	SW, AC, MAT
	14. In-place Density & Water Content (NDG)	ASTM D6938–17ae1 ASTM D2922-05 ASTM D3017-05 BS 1377-9:1990 Clause 2.5	
	15. Plate Loading Test	BS 1377-9:1990 Method 4.1	AC
	16. Density	BS 1377-2:2022, Section 8 BS EN ISO 17892-2:2014	SW, MAT
	17. Permeability in Triaxial Cell	BS 1377-6:1990 (Section 6) BS EN ISO 17892-11:2019	SW
	18. Unconsolidated Undrained Triaxial (UU)	BS 1377-7:1990 (Section 8) BS EN ISO 17892-8:2018 ASTM D2850-15	
	19. Consolidated Undrained Triaxial (CU)	BS 1377-8:1990 (Section 7) BS EN ISO 17892-9:2018 ASTM D4767-11 (2020)	
	20. Consolidated Drained Triaxial (CD)	BS 1377-8:1990 (Section 8) BS EN ISO 17892-9:2018 ASTM D7181-20	
	21. Oedometer (One-Dimensional Consolidation)	BS 1377-5:1990 (Section 3) BS EN ISO 17892-5:2017 ASTM D2435/D2435M-11(2020)	
	22. Falling Head Permeability	KH. Head Vol. 2 BS EN ISO 17892-11:2019	
	23. Bentonite content in soil	ADM/CE/024:2019	SW, MAT

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B. SOIL	24. Soil Resistivity Using the Wenner Four-Electrode Method	ASTM G57-20 (BS EN IEC 62561-7:2018)	SW
	25. Corrosion Rates by Potentiodynamic Polarization Resistance Measurements	ASTM G59-97(2020) ASTM G102-89(2015)e1 (BS EN IEC 62561-7:2018)	
	26. Constant Head Permeability	BS 1377-5:1990; Clause 5 KH. Head Vol. 2 BS EN ISO 17892-11:2019	SW, MAT
	27. Redox potential	BS 1377-3: 2018 +A1 2021 Clause 14	SW
C. CONCRETE **1. Fresh Concrete**	1. Slump Test	SS 78: Pt A2: 1987 BS 1881-102:1983 BS EN 12350-2:2019	SW
	2. Density (Fresh Concrete)	SS 78: Pt A7: 1987 BS 1881-107:1983 BS EN 12350-6:2019	
	3. Sampling	BS EN 12350-1: 2019 SS 78 Part A1:1987 BS 1881-101:1983	
	4. Air Content-Pressure Methods	BS EN 12350-7: 2019 SS 78 Part A6: 1987 BS 1881-106:1983	
	5. Flow Table Test	SS 78: Pt A5: 1987 BS 1881-105:1984 BS EN 12350-5:2019	
	6. Degree of Compactibility	BS EN 12350-4:2019	
	7. Laboratory Mixing and Sampling	SS 78: Pt 25: 1987 BS 1881-125:2013 BS EN 480-1:2014	
	8. Time of Setting of Concrete Mixtures by Penetration Resistance	ASTM C403/C403M-16	
	9. Slump-flow test	BS EN 12350-8:2019	
	10. V-funnel test	BS EN 12350-9:2010	
	11. L box test	BS EN 12350-10:2010	
	12. Sieve segregation test	BS EN 12350-11:2010	

MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
C. CONCRETE	**1. Fresh Concrete**	13. J-ring test	BS EN 12350-12:2010	) SW
		14. Adiabatic Temperature Rise of Fresh Concrete	ADM/CE/023:2017	)
	2. Hardened Concrete (Physical Tests)	1. Petrographic Examination of Hardened Concrete	ASTM C856-20	) SW, JAA
		2. Density (Hardened Concrete)	SS 78: Pt A14: 1987 BS 1881-114:1983 BS EN 12390-7:2019	) SW,) WCK, FN)
		3. Compressive Strength of Cubes	SS 78: Pt A16: 1987 BS 1881-116:1983 BS EN 12390-3:2019 AS 1012.9:2014	)
		4. Water Absorption	SS 78: Pt A22: 1987 BS 1881-122:2011+A1:2020 ASTM C642-21	) SW,) WCK)
		5. Water Permeability	DIN 1048-5:1991	)
		6. Depth of penetration of water under Pressure	BS EN 12390-8:2019	)
		7. Making Test Beams	SS 78 Part A9: 1987 BS 1881-109:1983 BS EN 12390-1:2021 BS EN 12390-2:2019	) SW)))
		8. Making Test Cylinders	SS 78 Part A10: 1987 BS 1881-110:1983 BS EN 12390-1:2021 BS EN 12390-2:2019	))))
		9. Tensile Splitting Strength of Test Specimens	SS 78 Part A17: 1987 BS 1881-117:1983 BS EN 12390-6:2009	) SW, WCK))
		10. Making of Test Cubes	SS 78: Pt A8: 1987 BS 1881-108:1983 BS EN 12390-1:2021 BS EN 12390-2:2019	) SW)))

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2. Hardened Concrete (Physical Tests)	11. Flexural Strength	SS 78: Pt A18: 1987 BS 1881-118:1983 BS EN 12390-5:2019	SW, WCK
	12. Compressive Strength of Cores	SS 78: Pt A20: 1987 BS 1881-120:1983 BS EN 12504-1:2019 AS 1012.9:2014	
	13. Static Modulus of Elasticity in Compression	BS 1881-121:1983 ASTM C469/C469M-14 BS EN 12390-13:2021	SW, WCK
	14. Initial Surface Water Absorption	BS 1881-208:1996	SW
	15. Length Change (Drying Shrinkage & Wetting Expansion)	ASTM C157/C157M-17	
	16. Concrete's Ability to Resist Chloride Ion Penetration (Rapid Chloride Permeability Test)	ASTM C1202-22	SW, WCK
	17. Coefficient of Permeability	Darcy's Theory - HDB Test Method ADM/CE/017:2013	
	18. Water Penetration & Water Gain	HDB Test Method (1 April 1992) ADM/CE/018:2014	SW
	19. Compressive Strength of Moulded Cylinder Specimens	BS EN 12390-3:2019 AS 1012.9:2014	
	20. Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete	ASTM C457/C457M-16 (Procedure B)	
	21. Water Sorptivity	ASTM C1585-20 ADM/CE/020:2016	
	22. Density, Absorption, and Voids	ASTM C642-21	SW, WCK
	23. Calibration of Cube Mould	BS EN 12390-1:2021	SW

MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
2. Hardened Concrete (Physical Tests)	24.	Autogenous Strain of Cement Paste and Mortar	ASTM C1698-19	SW
	25.	Flexural tensile strength (limit of proportionality (LOP), residual)	BS EN 14651:2005+A1:2007	
	26.	Fibre content in fresh and hardened concrete	BS EN 14721:2005+A1:2007	
	27.	Chloride Migration Coefficient	NT BUILD 492:1999	
	28.	Drying Shrinkage	BS ISO 1920-8:2009 BS EN 12390-16:2019 BS 8443:2005 (Annex B)	SW,WCK
	29.	Creep in Compression	BS ISO 1920-9:2009 BS EN 12390-17:2019 ASTM C512/C512M-15	SW, WCK
	30.	Energy absorption capacity of fibre reinforced slab specimens	BS EN 14488-5:2006	
3. Hardened Concrete (Non-Destructive Tests)	1.	Determination of Rebound Number of Hardened Concrete	ASTM C805/C805M-18 BS EN 12504-2:2021	SW, AC
	2.	Ultrasonic Pulse Velocity Measurement	ASTM C597-16 BS EN 12504-4:2021	
	3.	Covermeter Test	BS 1881-204:1988	
	4.	Strain Measurement (Electrical Displacement)	BS 1881-206:1986	SW
	5.	Initial Surface Absorption	BS 1881-208:1996	
	6.	Half-Cell Potential Measurement	ASTM C876-15	SW, AC
	7.	Depth of Carbonation, cores or broken (on concrete)	BS EN 14630:2006 BRE Publication (IP6/81) RILEM TC14-CPC 1988	
	8.	Penetration Resistance	ASTM C803/C803M-18	

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
D. REPAIR MATERIAL			
1. Non-Shrink Grout (For Pressure Grouting)	1. Flow Consistency	ASTM C939/C939M-16a	SW
	2. Compressive Strength	ASTM C942-21	
	3. Expansion/Shrinkage	ASTM C940-16	
	4. Bleeding	ASTM C940-16	
	5. Setting Time (Initial & Final Set)	ASTM C953-17	
2. Non-Shrink Grout (For Semi-Precast Construction)	1. Flow Consistency	BS 4551-1:1998 ASTM C1437-20	SW
	2. Compressive Strength	BS EN 196-1:2016 ASTM C109/C109M-21	SW, WCK
	3. Change in Height	ASTM C827/C827M-16	SW
	4. Setting Time	BS EN 196-3:2016	
	5. Bond Strength at 28 days	BS 6319-4:1984 BS EN 12615:1999	
3. Polymer Modified Cement Mortar	1. Compressive Strength	ASTM C109/C109M-21 BS EN 12190:1999 ASTM C349-18	SW, WCK SW
	2. Stiffening time	BS EN 1015-9:1999	SW
	3. Shrinkage at 28 days	ASTM C531-18	
	4. Tensile pull off strength (before and after weathering)	BS EN 1015-12:2016 ADM/CE/010:2017 ADM/CE/011:2017	
4. Bonding Agent	1. Slant Shear Bond Strength (Type I)	ASTM C1042:1999	SW
	2. Slant Shear Bond Strength (Type II)	ASTM C1042:1999	
	3. Total Solids Content	ISO 124:2014	

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
5. Waterproofing Material for External Wall Seepage Repair	1. Tensile pull off strength	ASTM D4541-02(Method A, Type I Tester) ASTM D7234-21	SW
	2. Water Vapour Transmission (Water Method only)	ASTM E96/E96M-22 ASTM D1653-13(2021)	
	3. Tensile Strength & Elongation at Break	ASTM D412-16(2021) Method A	
	4. Crack Bridging	ASTM C836/C836M-18(2022) ADM/CE/001:2017 AS/NZS 4548.5:1999	SW
6. Flexible Cementitious Waterproof Membrane (Water-Based)	1. Tensile pull off strength	ASTM D4541-02 (Method A, Type I Tester) ASTM D7234-21	SW
	2. Tensile Strength & Elongation at Break	ASTM D412-16(2021) Method A	
	3. Crack Bridging	ASTM C836/C836M-18(2022) ADM/CE/002:2017	
	4. Water Penetration Test	ADM/CE/003:2010 based on DIN 1048-5:1991	
	5. Initial Hardness (Shore A)	ASTM D2240-15(2021)	
	6. Set to touch	ASTM D1640/D1640M-14(2018)	
7. Flexible Non-Cementitious Waterproof Membrane (Water-Based)	1. Tensile pull off strength	ASTM D4541-02 (Method A, Type I Tester) ASTM D7234-21	SW
	2. Tensile Strength & Elongation at Break	ASTM D412-16(2021) Method A	
	3. Crack Bridging	ASTM C836/C836M-18(2022) ADM/CE/002:2017	
	4. Water Penetration Test	ADM/CE/004:2010 based on DIN 1048-5:1991	
	5. Initial Hardness (Shore A)	ASTM D2240-15(2021)	
	6. Set to touch	ASTM D1640/D1640M-14(2018)	

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
8. Waterproofing Membrane for RC Roof - Bituminous Type	1. Tensile pull off strength	ASTM D4541-02 (Method A, Type I Tester) ASTM D7234-21	) SW)))
	2. Tensile Strength & Elongation at Break	ASTM D412-16(2021) Method A	)
	3. Crack Bridging	ASTM C836/C836M-18(2022) ADM/CE/002:2017	))
	4. Water Vapour Transmission	ASTM E96/E96M-22	)
	5. Water Penetration Test	ADM/CE/005:2010 based on DIN 1048-5:1991	))
	6. Initial Hardness (Shore A)	ASTM D2240-15(2021)	)
	7. Accelerated Weathering	ASTM G154-16 ADM/CE/007:2012	))
	8. Set to touch	ASTM D1640/D1640M-14(2018)	)
	9. Solid Content	SS 133: 2017 Annex D (Method A)	)
	10. Heat Test	SS 133: 2017 Annex H	)
	11. Water Resistance Test	SS 133: 2017 Annex J	)
	12. Direct Flame Test	SS 133: 2017 Annex K	)
9. Repair Material - Reinforcement Primer / Reinforcement Bar	1. Half-Cell Potential	ASTM C876-15	) SW)
	2. Bond Performance	SS 2 Part 3: 1987 Appendix A	)
10. Epoxy Mortar	1. Working Time, Initial Setting Time and Service Strength Setting Time	ASTM C308-18	) SW
	2. Compressive Strength	ASTM C579-18 BS 6319-2:1983	))

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
10. Epoxy Mortar	3. Coefficient of Linear Thermal Expansion	ASTM C531-18	)
	4. Water Absorption	ASTM C413-18	)
	5. Tensile Strength	ASTM C307-18 BS 6319-7:1985	)
	6. Flexural Strength	ASTM C580-18 BS 6319-3:1990	)
11. Epoxy Resin for Injection	1. Determination of Bond Strength	ASTM C882/C882M-20	) SW
	2. Density	SS 5: Pt B7: 2013 (2018) ASTM D1475-13(2020)	))
12. Bituminous and Non-Bituminous Pre-formed Waterproofing Membrane for Concealed Roof	1. Dimensional Stability	SS 374: 1994 (2017)	) SW
	2. Tensile Strength and Elongation at Break		)
	3. Tensile Shear at Joints		)
	4. Pliability		)
	5. Water Absorption and Soluble Matter		)
	6. Water Vapour Transmission		)
	7. Hydrostatic Test		)
	8. Resistance to Leakage at Joint		)
13. Waterproofing Membrane	1. Thickness and Mass Per Unit Area	DIN 53353:1979-12 DIN 16726:2017 BS EN 1849-1:2000 BS EN 1849-2:2019 BS EN 22286:1994 (BS 3424-1:1994) (ISO 2286-2:1986) DIN EN ISO 2286-3:2016 ASTM D3767-03(2020)	) SW)))))))))

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
13. Waterproofing Membrane	2. Tensile Strength & Elongation at Break	SS 374: 1994 (2017) ASTM D412-16(2021) Method A BS EN 12311-1:2000 BS EN 12311-2:2013 BS EN ISO 527-1:2019 BS EN ISO 527-3:2018	)
	3. Dimensional Stability	SS 374: 1994 (2017) BS EN 1107-1:2000 BS EN 1107-2:2001 DIN 53377:2021 DIN 16726:2017	)
	4. Watertightness/Behaviour under Hydrostatic Pressure / Water impermeability	SS 374: 1994 (2017) BS EN 1928:2000 DIN 16726:2017 BS EN 12390-8:2019, based on BS EN 14891:2017, Part A7 for concrete mix design	) SW
	5. Peel or Stripping Strength to Concrete	ASTM D903 -98(2017)	)
	6. Puncture Resistance	ASTM E154/E154M-08a(2019) Section 10	)
	7. Impact Resistance	ADM/CE/021:2016 & ASTM G14-04 (2018)	)
	8. Static Crack Bridging	ASTM C836/C836M-18(2022) ASTM C1305/C1305M-16 BS EN 1062-7:2004, Method A	)
	9. Pull-Off Adhesion Strength	ASTM D4541:2002 (Method A, Type I Tester) ASTM D7234-21 BS EN 1542:1999	)
	10. Artificial ageing by long term exposure to elevated temperature	BS EN 1296:2001 SS 374: 1994 (2017) DIN 16726:2017	)
	11. Behaviour after Storage in Aqueous Solutions	DIN 16726:2017	)

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13. Waterproofing Membrane	12. Chemical Resistance	BS EN 14414:2004 (Method A & B) ASTM D543-21	) SW)
	13. Resistance to Leaching	BS EN 14415:2004 (Method A & B)	)
	14. Hydrostatic Pressure Resistance	ASTM D5385/D5385M-20	)
	15. Lateral Water Migration	ADM/CE/022:2016 ASTM D5385/D5385M-20	)
	16. Tear Strength	ASTM D624-00(2020) (Type C & T)	)
	17. Resistance to static loading	BS EN 12730:2015 Method B	)
	18. Resistance Tearing	BS EN 12310-2:2018	)
	19. Peel resistance of joints	BS EN 12316-2:2013	)
	20. Electrical resistivity	ASTM D257-14(2021)e1	)
	21. Adhesive and Cohesive Strength Between Materials in Roofing or Waterproofing Membranes and Systems	ASTM D7105/D7105M-06 (2019)e1	)
	22. Static Puncture Resistance	ASTM D5602/D5602M-18	)
14. Rubber Waterstop	1. Change in Mass (after immersion) Change in Volume (after immersion)	ASTM D471-16a(2021)	) SW

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E. BUILDING MATERIAL			
1. Tile Adhesive (Fast and Normal Set)	1. Tensile Adhesion Bond Strength	BS EN 1348:2007 BS EN 12004-2:2017	) SW
	2. Tensile Adhesion Bond Strength (After Water immersion)	BS EN 1348:2007 BS EN 12004-2:2017	))
	3. Tensile Adhesion Bond Strength (After Heat Aging)	BS EN 1348:2007 BS EN 12004-2:2017	))
	4. Open Time	BS EN 1346:2007 BS EN 12004-2:2017	))
	5. Deformity	BS EN 12002:2008 BS EN 12004-2:2017	))
	6. Slip	BS EN 1308:2007 BS EN 12004-2:2017	))
	7. Pull Out Test (Site Test)	ADM/CE/015:2011	) AC
2. Tile Grout	1. Shrinkage	BS EN 12808-4:2009	) SW
	2. Water Absorption	BS EN 12808-5:2008	)
	3. Compressive Strength	BS EN 12808-3:2008	)
	4. Flexural Strength	BS EN 12808-3:2008	)
	5. Abrasion Resistance	BS EN 12808-2:2008	)
3. Prepacked Floor Screed/ Prepacked Waterproof Screed	1. Average compressive strength	ASTM C109/C109M-21	) SW, WCK
	2. Flow	ASTM C1437-15	) SW
	3. Water Absorption	ASTM C413-18	)
	4. Water Penetration Test	ADM/CE/003:2010 based on DIN 1048-5:1991	)
	5. Flexural Strength	ASTM C348-21	)
	6. Water Retentivity	BS 4551:2005+A2:2013	)
	7. Stiffening time	BS EN 1015-9:1999 (Method A)	)
	8. Volume change	ASTM C827/C827M-16	)

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
4. Prepacked Plaster/ Prepacked Mortar	1. Tensile pull off strength	BS EN 1015-12:2016	) SW
	2. Compressive Strength	BS EN 1015-11:2019 BS 4551-1:1998	))
	3. Consistence Retentivity	BS 4551:2005+A2:2013	)
	4. Water Retentivity	BS 4551:2005+A2:2013	)
	5. Stiffening time	BS EN 1015-9:1999 (Method A)	)
	6. Linear Shrinkage	ASTM C531-18	)
	7. Pull Out Test (Site Test)	ADM/CE/016:2011	) AC
	8. Determination of modulus of elasticity in compression	BS EN 13412:2006 (Method 2)	) SW, WCK
	9. Flexural strength	BS EN 1015-11:2019	) SW
5. Prepacked Skim Coat	1. Tensile pull off strength	BS EN 1015-12:2016	) SW
	2. Tensile pull off strength (after weathering)	BS EN 1015-12:2016 ADM/CE/008:2017	))
	3. Compressive Strength	BS EN 1015-11: 2019	)
	4. Water Retentivity	BS 4551: 2005+A2: 2013	)
	5. Setting Time	BS EN 196-3:2016	)
	6. Linear Shrinkage	ASTM C531-18	)
	7. Pull Out Test (Site Test)	ADM/CE/016:2011	) AC
6. Acrylic Polymer Cementitious Coating	1. Compressive Strength	ASTM C109/C109M-21	) SW, WCK
	2. Flexural Strength	ASTM C348-21	) SW
	3. Tensile Strength	ASTM C307-18	)
	4. UV Accelerated Weathering	ASTM G154-16 ADM/CE/009:2012	))
	5. Skid Resistance	ASTM E303-22	)

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
6. Acrylic Polymer Cementitious Coating	6. Taber Abrasion	ASTM D4060-19 ADM/CE/012:2015	) SW)
	7. Shear Bond Adhesive	ASTM C482-20 ADM/CE/013:2010	) SW)
	8. Water Penetration Test	ADM/CE/006:2010 based on DIN 1048-5:1991	)
7. Self-Leveling Screed	1. Compressive Strength	ASTM C109/C109M-21	) SW, WCK
	2. Linear Shrinkage/Length Change	ASTM C157/C157M-17 ASTM C531-18	) SW)
	3. Slip Resistance (before & after accelerated weathering)	BS 7976-2:2002+A1:2013	)
	4. Tensile Adhesion Bond Strength	ASTM D4541-02 (Method A, Type I Tester) BS EN 13892-8:2002	)))
	5. Shear Adhesion Bond Strength	ASTM C482-20	)
	6. Accelerated Weathering (UV Exposure)	ASTM G154-16	)
	7. Flowability	ASTM C939/C939M-16a	)
	8. Water Absorption	ASTM C413-18 (Method A)	)
	9. Abrasion Resistance	BS EN 13892-4:2002	) SW, SS
8. Sealant	1. Staining and Color Change	ASTM C510-16(2022)	) SW
	2. Extrusion Rate	ASTM C1183/C1183M-13 (2018)	)
	3. Rheological (Flow) Properties	ASTM C639-15(2020)	)
	4. Indentation Hardness	ASTM C661-15(2022)	)
	5. Tack-Free Time	ASTM C679-15(2022)	)
	6. Adhesion and Cohesion Under Cyclic Movement (Hockman Cycle)	ASTM C719-22	)
	7. Effects of Heat Aging	ASTM C1246-17(2022)	)

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
8. Sealant	8. Effects of Laboratory Accelerated Weathering	ASTM C793-05(2017)	) SW
	9. Adhesion-in-Peel	ASTM C794-18	)
	10. Durability of Sealants Exposed to Continuous Immersion in Liquids	ASTM C1247-20	)
	11. Extrudability	ISO 8394-2: 2017	) SW, SS
	12. Rate of Cure	BS EN 14187-1: 2017	)
	13. Tack Free Time	BS EN 14187-2: 2017	)
	14. Self-Levelling Properties	BS EN 14187-3: 2017	)
	15. Change in Mass and Volume (Self-Levelling Sealant)	ISO 10563: 2017	)
	16. Change in Mass and Volume after Immersion in Test Fuels and Liquid Chemicals	BS EN 14187-4: 2017	)
	17. Resistance to Hydrolysis	EN 14187-5: 2019	)
	18. Resistance to Flame	EN 14187-7: 2019	)
	19. Adhesion/Cohesion Properties at Variable Temperatures	BS EN ISO 9047: 2003	)
	20. Tensile Properties at Maintained Extension	ISO 8340: 2005	)
	21. Elastic Recovery of Sealants	EN ISO 7389: 2003	)
	22. Artificial Weathering by UV-Irradiation	BS EN 14187-8: 2017	)
	23. Adhesion/Cohesion Properties after Immersion in Test Fuels and Liquid Chemicals	BS EN 14187-6: 2017	)
F. PAINT/ COATING	1. Adhesion (Pull Off) Strength	ASTM D4541-17 (Method B) ASTM D7234-21 BS EN ISO 4624:2016 (Method B) BS EN 1542:1999	) SW, AC, SS))))

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
F. PAINT/ COATING	2. Wet Film Thickness	ISO 2808:2019 (Method 1A) SS 5-B1:2013 (2018)	) SS))
	3. Dry Film Thickness	ISO 2808:2019 (Method 4A, 6A, 7B2, 7C & 10) ASTM D7091-21 ASTM D6132-13(2017) SS 5-B1:2013 (2018) BS EN ISO 2178:2016	) AC, SS)))))
	4. Alkali resistance (spotting method)	SS 5 - G2 : 2003 (2013)	) SW
	5. Compatibility on wet concrete	BS EN 13578:2003	)
	6. Methods of conditioning before testing - UV accelerated weathering	BS EN 1062-11:2007 ISO 11507:2007 ISO 16474-3:2021	)
	7. Static Crack Bridging	BS EN 1062-7:2004, Method A	)
	8. Tensile & Elongation at Break	BS ISO 37:2017	)
	9. Water-Vapour Transmission	BS EN ISO 7783:2018	)
	10. Luminance Factor	SS 589-2013:2022 (BS EN 1871:2020Annex F)	))
	11. Skid Resistance	SS 589-2013:2022 Annex C	)
	12. Flow Resistance	SS 589: 2013 Annex B	)
	13. Softening Point	SS 589-2013:2022 (BS EN 1871:2020 Annex G)	)
	14. Heat stability	SS 589-2013:2022 (BS EN 1871:2020 Annex H)	)
	15. Rating Adhesion by Tape Test	ASTM D3359-17	) SW, SS
	16. Carbon Dioxide Permeability	BS EN 1062-6:2002 (Method A)	) SW
	17. Gloss Value at 20°, 60° and 85°	ISO 2813:2014 SS 5-E1:2020	) SW, SS

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
F. PAINT/ COATING	18. Visual comparison of colour of paints	ISO 3668:2017 SS 5 - E3:2019	SW, SS
	19. Pencil hardness test	ASTM D3363-20	SS
	20. Scratch resistance test	SS 5-F2:2013 (2018)	
	21. Resistance to salt spray	SS 5-G10:2020	
	22. Resistance to humidity	SS 5-G7:2020	
G. ADMIXTURES	1. Water Reduction	BS EN 12350-2:2019 BS EN 480-1:2014 SS EN 934-2:2015	SW
	2. Compressive Strength	BS EN 12390-3:2019 BS EN 480-1:2014 SS EN 934-2:2015	
	3. Air Content-Pressure Methods	BS EN 12350-7:2019 BS EN 480-1:2014 SS EN 934-2:2015	
	4. Increase in Consistence	BS EN 12350-2:2019 BS EN 480-1:2014 SS EN 934-2:2015	
	5. Retention of Consistence	BS EN 12350-2:2019 BS EN 480-1:2014 SS EN 934-2:2015	
	6. Bleeding	BS EN 480-4:2005 BS EN 480-1:2014 SS EN 934-2:2015	
	7. Setting Time	BS EN 480-2:2006 BS EN 480-1:2014 SS EN 934-2:2015	
	8. Capillary Absorption	BS EN 480-5:2005 BS EN 480-1:2014 SS EN 934-2:2015	
	9. Sampling	BS EN 934-6:2019 SS EN 934-6:2008 (2015)	

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
H. CEMENT **1. Ordinary Portland Cement/Sulphate-resisting and Portland Blast Furnace Slag Cement. Ground Granulated Blast Furnace Slag, Silica Fume & Fly Ash**	1. Determination of Strength	BS EN 196-1:2016 ASTM C109/C109M-21 SS 397 Part 1: 1997	SW SW, WCK SW
	2. Determination of Setting Times	BS EN 196-3:2016 SS 397 Part 3: 1997 ASTM C191-21	
	3. Determination of Soundness	BS EN 196-3:2016 SS 397 Part 3: 1997	
	4. Determination of Fineness	BS EN 196-6:2018 SS 397 Part 6: 1997 ASTM C204-18e1	
	5. Moisture Content	BS EN 15167-1:2006 Annex A SS EN 15167-1:2008 Annex A (2016) ASTM C311/C311M-18	
	6. Activity Index	BS EN 196-1:2016 BS EN 15167-1:2006, 5.3.2.3 BS EN 13263-1:2005+A1:2009, 5.3.3 BS EN 450-1:2012, 5.3.2	
	7. Air Content	ASTM C185-20	
	8. Amount of Water Required for Normal Consistency	ASTM C187-16	
	9. Fineness by Wet Sieving	BS EN 451-2:2017 ASTM C430-17	
	10. Water Requirement for Category S Fly Ash	BS EN 450-1:2012, Annex B	
	11. Potential Expansion of Portland-Cement Mortars Exposed to Sulfate	ASTM C452-21	
2. Masonry Cement	1. Setting Time	BS EN 413-2:2016 BS EN 196-3:2016	SW
	2. Soundness	BS EN 196-3:2016	
	3. Compressive Strength	BS EN 196-1:2016	

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MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES		STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
	2. Masonry Cement	4.	Consistence of Fresh Mortar	BS EN 413-2:2016	) SW
		5.	Air Content	BS EN 413-2:2016	)
		6.	Water Retentivity	BS EN 413-2:2016	)
		7.	Sieve Residue	BS EN 196-6:2018	)
I.	**CURING COMPOUND**	1.	Water Retention	ASTM C156-20	) SW
		2.	Bond Strength Test	ASTM C882/C882M-20 Clause 11.3 only ADM/CE/019:2014	)
		3.	Density Test	ASTM D1475-13(2020)	)
		4.	Non-Volatile Matter Test	ASTM D1644-01(2017) (Method A & B)	)
		5.	Volatile Content	ASTM D2369-20	)
		6.	Curing Efficiency Index	BS 7542:1992	)
J.	**MASONRY UNITS**	1.	Dimension and Density	BS EN 12390-7:2019	) SW
	1. Ferrocement Roof Slabs / Sunbreaker Slabs	2.	Cover Measurement	BS 1881-204:1988	)
		3.	Initial Surface Absorption	BS 1881-208:1996	)
		4.	Carbonation Depth	BRE Publication (IP6/81) BS EN 14630:2006	)
	2. Burnt Clay and Shale Bricks	1.	Determination of Dimensions	SS 103: 1974	) SW
		2.	Determination of Compressive Strength		)
		3.	Water Absorption Test		)
		4.	Soluble Salt Content		)
		5.	Efflorescence Test		)

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
3. Masonry Units / Autoclaved Aerated Concrete	1. Compressive Strength	BS EN 772-1:2011+A1:2015 ASTM C1693-11(2017), Section 6	SW
	2. Density	BS EN 772-13: 2000 BS EN 678:1994 ASTM C1693-11(2017), Section 7	
	3. Drying Shrinkage	BS EN 680:2005 ASTM C1693-11(2017), Section 8	
	4. Water Absorption due to Capillary Action	BS EN 772-11:2011	
	5. Dimensions	BS EN 772-16: 2011	
4. Concrete Masonry Units	1. Geometrical Characteristics	SS 271: 1983	SW
	2. Compressive Strength		
	3. Drying Shrinkage		
	4. Total Water Absorption		
	5. Measurement of Dimensions	ASTM C140/C140M-22a	
	6. Compressive Strength		
	7. Absorption		
K. CERAMIC WALL AND FLOOR TILES	1. Determination of Dimensions	SS 483: 2000 BS ISO 13006:2018 (BS EN 14411:2016) BS EN ISO 10545-2:2018	SW
	2. Determination of Straightness of Side		
	3. Determination of Rectangularity		
	4. Determination of Surface Flatness		
	5. Determination of Surface Quality		

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
K. CERAMIC WALL AND FLOOR TILES	6. Determination of Resistance to Deep Abrasion	(SS 483: 2000) BS ISO 13006:2018 (BS EN 14411:2016) ISO 10545-6:2010	
	7. Tensile and Shear Adhesion Bond Strength	ASTM C482-20	
	8. Determination of Modulus of Rupture	(SS 483: 2000) BS ISO 13006:2018 (BS EN 14411:2016) ISO 10545-4:2019	
	9. Determination of Water Absorption	(SS 483: 2000) BS ISO 13006:2018 (BS EN 14411:2016) ISO 10545-3:2018	
	10. Determination of Scratch Hardness of Surface	EN 101:1991 BS 6431-13:1986 EN 159:1991 SS 301: 1985 Appendix G	
K. CERAMIC WALL AND FLOOR TILES	11. Slip Resistance Test	(SS 483: 2000) BS ISO 13006:2018 SS 485: 2011 (BS EN 14411:2016)	SW SW, AC
	12. Reverse Staining	ADM/CE/014:2011	SW
	13. Stain Resistance	(SS 483: 2000) BS ISO 13006:2018 (BS EN 14411:2016) SS 57: 1989 Appendix H.7 ISO 10545-14:2015	
	14. Chemical Resistance	(SS 483: 2000) BS ISO 13006:2018 (BS EN 14411:2016) ISO 10545-13:2016	
	15. Coefficient of Friction	SS 485: 2011	

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
K. CERAMIC WALL AND FLOOR TILES	16. Sampling and Basic for Acceptance	(SS 483: 2000) BS ISO 13006:2018 (BS EN 14411:2016) ISO 10545-1:2014	SW
	17. Colourfastness	SS 57: 1989 Appendix F SS 301: 1985 Appendix H	
L. ROCKS	1. Unconfined Compressive Strength of Core Specimens	ASTM D7012-14e1(Method C)	SW, MAT
	2. Water (Moisture) Content of Soil and Rock	ASTM D2216-19	
	3. Point Load Strength Index	ASTM D5731-16 ISRM Suggested Method - 1978	
	4. Petrographic Description of Rocks	ISRM Suggested Method - 1978	SW, JAA
	5. Particle Size Distribution	BS EN 13383-2:2019	SW, MAT
	6. Length-to-Thickness Ratio (Elongation)	BS EN 13383-2:2019	
	7. Particle Density & Water Absorption	BS EN 13383-2:2019	
	8. Block Integrity - Drop Test	BS EN 13383-1:2002 Annex B	SW
M. NATURAL STONE / GRANITE	1. Water absorption and Bulk Specific Gravity	ASTM C97/C97M-18	SW, MAT
	2. Compressive Strength	ASTM C170/C170M-17 BS EN 1926:2006, Annex A	
	3. Petrographic Examination	BS EN 12407:2019 BS EN 12670:2019	SW, JAA
	4. Modulus of Rupture	ASTM C99/C99M-18	SW, MAT
	5. Flexural Strength	ASTM C880/C880M-18	

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
N. STRUCTURAL FIXINGS	1. Determination of Tensile Strength (Pull Out Strength) of Structural Fixings in Concrete and Masonry	BS 5080-1:1993 BS 8539:2012+A1:2021 Annex B Clause 9.3	AC
	2. Allowable resistance of structural fixings in concrete or masonry	BS 8539:2012+A1:2021 Annex B Clause 9.2	
O. BITUMINUOUS PREMIXES	1. Bitumen Content	ASTM D2172/D2172M-17e1	SW
	2. Density of Premix on Cored Samples	BS 598-104:2005	SW, LCH
	3. Density of Cored Premix with Sample Preparation	BS 598-104:2005	
	4. Marshall Density	BS 598-107:2004 ASTM D1559-89	
	5. Marshall Stability	BS 598-107:2004 ASTM D1559-89 ASTM D6927-15	
	6. Particle Size Distribution	BS 812-103.1:1985	
	7. Percentage Voids Density of Core Method	BS 598-104:2005	
	8. Thickness of Core	ASTM D3549/D3549M-18 (Method A) BS EN 12697-36:2022	
	9. Asphalt Content by Ignition Method	ASTM D6307-19	
	10. Los Angeles Abrasion	BS EN 12697-17: 2017	
	11. Measuring Surface Frictional Properties Using the British Pendulum Tester	ASTM E303-22 SS 589-2013:2022 BS EN 1436:2018 BS EN 13036-4:2011	AC

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
O. BITUMINUOUS PREMIXES	12. Measuring Pavement Macrotexture Depth Using a Volumetric Technique	ASTM E965-15(2019) BS EN 13036-1:2010	AC
	13. Preparation of Asphalt Mixture Specimens Using Marshall Apparatus	ASTM D6926-20	SW, LCH
	14. Mechanical Size Analysis of Extracted Aggregate	ASTM D5444-15	
	15. Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures	ASTM D2726/D2726M-21	
O. BITUMINUOUS PREMIXES	16. Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures	ASTM D3203/D3203M-17	SW, LCH
	17. Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures	ASTM D2041/D2041M-19	
	18. Effect of Moisture on Asphalt Concrete Paving Mixtures	ASTM D4867/D4867M-09 (2014)	
	19. Determination of Wheel-tracking Rate and Depth	BS 598-110:1998 BS EN 12697-22:2020	
	20. Density of Bituminous Concrete in Place by Nuclear Methods	ASTM D2950/D2950M-14	SW, AC
P. PRECAST CONCRETE UNITS **1. Concrete Paving Blocks**	1. Compressive Strength	BS EN 1338:2003	SW
	2. Visual Aspects and Appearance (Annex J)		
	3. Shape and Dimensions, Thickness of Facing Layer (Annex C)		
	4. Tensile Splitting Strength (Annex F)		
	5. Slip/Skid Resistance (USRV) (Annex I)		

	MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT		SIGNATORY
		6.	Total Water Absorption (Annex E)		)	
	2. Concrete Kerb, Channel	1.	Water Absorption	SS 214: 2009 BS 7263-1:1994 BS 7263-1:2001	)	SW, WCK
		2.	Transverse Strength		)	
	3. Slab (Aeration/Porous)	1.	Water Absorption		)	SW
		2.	Transverse Strength		)	
	4. Concrete Paving Flags	1.	Visual Aspects and Appearance (Annex J)		)	
		2.	Bending Strength and Breaking Load (Annex F)	BS EN 1339:2003	)	
		3.	Slip/Skid Resistance (USRV) (Annex I)		)	
		4.	Total Water Absorption (Annex E)		)	
	5. Concrete Kerb Units	1.	Visual Aspects and Appearance (Annex J)		)	SW
		2.	Shape and Dimensions, Thickness of Facing Layer (Annex C)		)	
		3.	Bending Strength (Annex F)	BS EN 1340:2003	)	
		4.	Slip/Skid Resistance (USRV)(Annex I)		)	
		5.	Total Water Absorption (Annex E)		)	
	6. Clay Pavers	1.	Shape and Dimensions (Annex B)		)	SW
		2.	Transverse Breaking Load (Annex D)	BS EN 1344:2013	)	
		3.	Abrasion Resistance (Annex E)		)	
		4.	Slip/Skid Resistance (USRV)		)	
Q.	**GROUTS** **1. Geotechnical Grouting**	Specification BS EN 12715: 2020 1.	Bleeding	BS EN 12715:2020 ASTM C940-16	)))	SW

MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES		STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
Q.	**GROUTS** **1. Geotechnical Grouting**	2.	Setting Time	BS EN 196-3:2016	) SW
		3.	Density by Mud Balance	BS EN ISO 10414-1:2008	)
		4.	Marsh Cone Viscosity	BS EN 14117:2004	)
		5.	Viscosity & Yield Strength	BS EN ISO 10414-1:2008	)
		6.	Workability by Abraham Cone	BS EN 12350-8:2019	)
		7.	Penetrability by Filter Pump	BS EN 14497:2004	)
		8.	Compressive Strength	BS 1377-7:1990, Section 7 (Load Frame Method)	))
	2. Prestressing Tendons	1	Sieve test	BS EN 445:2007 Clause 4.2	) SW
		2	Fluidity test - Cone method	BS EN 445:2007 Clause 4.3.1	)
		3	Fluidity test - Grout spread	BS EN 445:2007 Clause 4.3.2	)
		4	Volume change and bleeding measurement - Wick-induced test	BS EN 445:2007 Clause 4.5	)
		5	Compressive strength test	BS EN 445:2007 Clause 4.6	)
		6	Setting time	BS EN 196-3:2016	)
		7	Density test	BS EN 445:2007 Clause 4.7	)
R.	**SOIL-CEMENT MIXTURE (CEMENT TREATED BASE)**	1.	Wetting and Drying Compacted Soil-Cement Mixtures	ASTM D559/D559M-15	) SW
		2.	Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures	ASTM D558-19	) SW,) MAT)
		3.	Compressive Strength of Molded Soil-Cement Cylinders	ASTM D1633-17	))))
		4.	Measuring Thickness of Concrete Elements Using Drilled Concrete Cores	ASTM C174/C174M-17	)
S.	**RESILIENT FLOOR COVERINGS**	1.	Determination of side length, edge, straightness and squareness of tiles	BS EN ISO 24342:2018	) SW
		2.	Determination of overall thickness	BS EN ISO 24346:2012	)

MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT	SIGNATORY
S.	**RESILIENT FLOOR COVERINGS**	3. Determination of thickness of layers	BS EN ISO 24340:2012	) SW
		4. Determination of mass per unit area	BS EN ISO 23997:2012	)
		5. Determination of flexibility and deflection	BS EN ISO 24344:2012 (Method A)	)
		6. Determination of wear resistance. Frick-Taber test	BS EN 660-2:1999	)
		7. Slip Resistance (dry floor friction & wet pendulum test methods)	SS 485:2011	) SW, AC, SS
		8. Determination of staining and resistance to chemicals	BS EN ISO 26987:2012	) SW
		9. Castor chair test	ISO 4918:2016	) SW, SS
		10. Resistance to burning cigarettes	EN 1399:1997 (Method B)	)
T.	**DRY WALL**	1. Determination of partition wall stiffness (Annex A)	SS 492: 2001 (2014) BS 5234-2:1992	) SW)
		2. Determination of surface damage by small hard body impact (Annex B)	SS 492: 2001 (2014) BS 5234-2:1992	))
		3. Determination of resistance to damage by impact from a large soft body (Annex C)	SS 492: 2001 (2014) BS 5234-2:1992	))
		4. Determination of resistance to perforation by small hard body impact (Annex D)	SS 492: 2001 (2014) BS 5234-2:1992	))
		5. Determination of resistance to structural damage by multiple impacts from a large soft body (Annex E)	SS 492: 2001 (2014) BS 5234-2:1992	))
		6. Determination of the effects of door slamming (Annex F)	SS 492: 2001 (2014) BS 5234-2:1992	))
		7. Determination of resistance to crowd pressure (Annex G)	SS 492: 2001 (2014) BS 5234-2:1992	))

MATERIALS / PRODUCTS TESTED		TESTS / PROPERTIES		STANDARD METHODS / TECHNIQUES / EQUIPMENT		SIGNATORY
T.	**DRY WALL**	8.	Lightweight anchorage pull out test (Annex H)	SS 492: 2001 (2014) BS 5234-2:1992	))	SW
		9.	Lightweight anchorage pull down test (Annex J)	SS 492: 2001 (2014) BS 5234-2:1992	))	
		10.	Heavyweight anchorage (wash basin) eccentric downward loading test (Annex K)	SS 492: 2001 (2014) BS 5234-2:1992	)))	
		11.	Heavyweight anchorage (high level wall cupboard) eccentric downward loading test (Annex L)	SS 492: 2001 (2014) BS 5234-2:1992	)))	
		12.	Surface & Total water absorption	BS EN 520:2004+A1:2009 Clause 5.9	)	
		13.	Moisture Movement	ASTM C1185-08(2016) Clause 8 BS EN 12467:2012+A2:2018 Annex C	)))	
		14.	Water impermeability	BS EN 12467:2012+A2:2018 Clause 7.3.3	))	
		15.	Flexural Breaking Load	BS EN 520:2004+A1:2009 Clause 5.7	)	
U.	**WINDOWS & CURTAIN WALLS**	1.	Field watertightness test	BCA Conquas 21: 2017, Appendix 2 Part 5 Item 2. SS CP 96: 2002 (2011) Clause 4.3a	)	AC
V.	**RUBBER GASKET**	1.	Water absorption	ASTM D1056-20	)	SS
		2.	Compression deflection	ASTM D1056-20	)	
		3.	Oven aged compression deflection	ASTM D1056-20	)	
		4.	Compression set	ASTM D1056-20	)	

Schedule

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Approved Signatories

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WCK	:	Mr Wee Chip Kai
AC	:	Mr Chuo Chung Hai (Alex)
LCH	:	Ms Leong Chee Huan
FN	:	Fairuz Nabilah Binte Muzafar
JAA	:	Jayaram Jayasree Arul Aravind Baba
SS	:	Salim Suwignjo

Note :

This laboratory is accredited in accordance with the recognised International Standard ISO/IEC 17025. A laboratory's fulfilment 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. 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