PUBLIC WORKS LABORATORIES TEST DIRECTORY

LABORATORIES

CL	Central Laboratory (Tel: 2305 1290)
NL	North Lantau Regional Laboratory (Tel: 2109 0657)
KL	Kowloon Regional Laboratory (Tel: 2703 7332)
TP	Tai Po Regional Laboratory (Tel: 2144 1777)
TS	Tin Shui Wai Regional Laboratory (Tel: 2447 1677)
SS	Sham Shui Kok Regional Laboratory *(Former Tsuen Wan Regional Laboratory)* (Tel: 2439 9282)

KEY TO AVAILABILITY OF TEST

A	Laboratory accredited by HOKLAS for the test
A*	Equipment for the test are classified as "out of service", and shall be calibrated before use. HOKLAS certificates are issued only if the relevant calibration requirements are met.
√	Laboratory not accredited for the test
√*	Laboratory not accredited for the test. Equipment for the test are classified as "out of service", and shall be repaired and calibrated before use.
∇	Laboratory not set up to perform the test but has equipment
	Test not performed in the laboratory
#	Test programme shall be agreed with the laboratory in advance.
^	Voluntary suspension of accreditation

Notes: 1. Test/Calibration reports/certificates will normally be posted but, by arrangement, may be collected from the laboratory to which the samples were delivered.
2. *Italic font* indicates a test not frequently performed, i.e. infrequent test (performed less than once per year). The test may require longer time to perform if equipment needs to be calibrated prior to performing the test and/or staff need to be re-trained and audited before performing the test. Additional samples may be required for re-training/auditing

Aggregates

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
AGG 1.8	*Sieve analysis of mineral filler for bituminous paving mixtures*	*ASTM D546-05 with Modification*		2113					√#	
AGG 1.8(a)	Sieve analysis of mineral filler for asphalt paving mixtures	ASTM D546-17 with modification		2113		A	A	A	A	A
AGG 1.9	Determination of particle size distribution of aggregate by sieving	Section 10 of CS3:2013		2117		A	A	A	A	A
AGG 1.10	Determination of aggregate flakiness index	Section 11 of CS3:2013		2117		A	A	A	A	A
AGG 1.11	*Determination of aggregate elongation index*	*Section 12 of CS3:2013*		2117		A	A	A	A	A
AGG 1.12	Determination of density of mineral filler for bituminous paving mixtures	BS EN 196-6:2010 Annex NC		2113						
AGG 2.3	Determination of the compaction fraction value of aggregates for granular bed	GS(2006) App. 5.2	5.86	2113		A	A	A	A	A
AGG 2.3(a)	Determination of the compaction fraction value of aggregates for granular bed	GS(2020) App. 5.2		2113		A	A	A	A	A
AGG 2.4(a)	*Determination of particle densities and water absorption of aggregate with nominal size larger than 10 mm (wire basket method)*	*BS 812:Part 2:1995 Section 5.3*		2113		√		√	√	√
AGG 2.4(b)	*Determination of particle densities and water absorption of aggregate with nominal size not larger than 10 mm (pyknometer method)*	*BS 812:Part 2:1995 Section 5.5*		2113		√		√	√	√
AGG 2.5	Determination of bulk density of aggregate	BS 812:Part 2:1995		2113		√				
AGG 2.6 (a)	Determination of particle densities & water absorption of aggregate all larger than 10 mm (wire basket method)	Section 17 of CS3:2013		2117		A		A	A	A
AGG 2.6 (b)	Determination of particle densities & water absorption of aggregate 10 mm nominal size and smaller (pyknometer method)	Section 17 of CS3:2013		2117		A		A	A	A
AGG 2.7	Determination of aggregate moisture content	Section 18 of CS3:2013		2117		A	A	A	A	A
AGG 3.9	*Determination of Los Angeles value*	*Section 14 of CS3:2013*		2117		∇			A	
AGG 3.10	*Determination of aggregate impact value*	*Section 15 of CS3:2013*		2117					A	√
AGG 3.11	Determination of aggregate ten per cent fines value	Section 16 of CS3:2013		2117		A	A	A	A	A
AGG 3.12	*Determination of aggregate soundness value*	*Section 19 of CS3:2013*		2117		A			A	
AGG 5.1	Determination of maximum metals and foreign material content for the recycled sub-base materials	GS 2006, Clause 9.47 (9)		2113		√#		√#	∇	√#
AGG 6.1	Determination of alkali silica reaction potential by ultra-accelerated mortar bar test	CS1:2010, Vol. 2:Section 22		2113	A					
AGG 6.2	*Determination of drying shrinkage*	*Section 20 of CS3:2013*		2117	A					
AGG 6.3	Determination of effect of organic substances by mortar method	Section 22 of CS3:2013		2117	A					
AGG 6.4	Determination of methylene blue value	Section 13 of CS3:2013		2117	A					

Bituminous materials

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
BIT 1.2	*Determination of solubility of bituminous binders*	*BS2000:Part 47:1983*	*9.49*	2119						√
BIT 1.3(a)	*Determination of softening point of bitumen having softening point 80ºC or below by ring and ball method*	*BS2000:Part 58:1993*	*9.49*	2119						√#
BIT 1.4	*Determination of loss on heating of bitumen and flux oil*	*BS2000:Part 45:1993*	*9.49*	2119						√#
BIT 1.7	*Determination of viscosity of asphalts by vacuum capillary viscometer*	*ASTM D2171-88, 94 and 01*	*9.49*	2119						√
BIT 1.11	Determination of viscosity of asphalt binder using rotational viscometer	AASHTO T316-06/T316-13(2017)		2112 / 2123			√	√		A
BIT 1.11(a)	Determination of viscosity of asphalt binder using rotational viscometer	AASHTO T316-06/T316-13(2017) with modifications		2112		A	A	A		A
BIT 1.12	Determining the rheological properties of asphalt binder using a dynamic shear rheometer (DSR)	AASHTO T315-09		2123						A
BIT 1.12(a)	Determination of the rheological properties of asphalt binder using a dynamic shear rheometer (DSR)	AASHTO T315-12 (2016)		2123						√
BIT 1.13	Effect of heat and air on a moving film of asphalt (rolling thin-film oven test)	AASHTO T240-09		2123						A
BIT 1.13(a)	Effect of heat and air on a moving film of asphalt (rolling thin-film oven test)	AASHTO T240-13		2123						√
BIT 1.15	Determination of flash point by using cleveland open cup tester	AASHTO Designation T48-06		2123						A
BIT 1.15(a)	Determination of flash point by cleveland open cup	AASHTO T48-06 (2015)		2123						√
BIT 1.16	*Determination of penetration of semi-solid and solid bituminous materials*	*ASTM D5-86*		2119						√
BIT 1.17	*Determination of the specific gravity or density of semi-solid and solid bituminous materials by nickel crucible method*	*ASTM D3289-85*		2119						√
BIT 1.18	*Determination of the ductility of bituminous materials*	*ASTM D113-86*		2119						√
BIT 1.19	*Determination of penetration of asphaltic materials*	*ASTM D1754-87 and D5-86*		2119						√
BIT 1.20	*Determination of solubility of asphalt materials in trichloroethylene*	*ASTM D 2042-81/85*		2119						√
BIT 1.21	*Determination of penetration of semi-solid and solid bituminous materials*	*ASTM D5-13*		2119 / 2123						√
BIT 1.22	*Determination of the softening point of bitumen and bituminous binders having softening point 80ºC or below by ring and ball method*	*BS EN 1427:2015/BS 2000-58:2015*		2119						√
BIT 1.23	*Determination of the ductility of bituminous materials*	*ASTM D113-07 with modification*		2119						√
BIT 1.24	*Determination of solubility of asphalt materials in trichloroethylene*	*ASTM D2042-15*		2119						√
BIT 1.25	*Determination of retained penetration of asphaltic materials (thin-film oven test and penetration test)*	*ASTM D1754-09 (2014) and D5-13*		2119						√
BIT 1.26	*Determination of viscosity of asphalts by vacuum capillary viscometer*	*ASTM D2171-10 with modification*		2119						√
BIT 1.27	*Determination of the loss in mass after heating of industrial bitumen*	*BS EN 13303:2009/BS 2000-506:2009*		2119						√
BIT 1.28	*Determination of density of semi-solid and solid bituminous materials by nickel crucible method*	*ASTM D3289-17 with modification*		2119						√
BIT 1.29	Determination of dynamic viscosity of highly modified bitumen by vacuum capillary viscometer with modification	T0620-2000 & ASTM D2171-10 with modification		2123						√
BIT 1.30	*Determination of the softening point of bitumen (ring-and-ball apparatus)*	*ASTM Designation: D36/D36M-14 (Reapproved 2020)*		2123						√
BIT 1.31	*Determination of flash points by cleveland open cup tester*	*ASTM Designation D92-18*		2123						√
BIT 3.9(a)	Determination of bitumen content of bituminous paving materials (with aggregate size smaller than 28mm) by centrifuge extractor	ASTM D2172-95 Method A		2112		A	A	A		A
BIT 3.9(b)	Determination of bitumen content of bituminous paving materials (with aggregate size greater than or equal to 28mm) by centrifuge extractor	ASTM D2172-95 Method A		2112		A	A	A		A
BIT 3.9(c)	Determination of asphalt binder content of asphalt mixtures by centrifuge extractor	ASTM D2172/D2172M-17 Method A		2112		A	A	A		A
BIT 3.10	Determination of aggregate grading of bituminous paving materials	ASTM C117-95 Procedure B & ASTM C136-96a with modifications		2112		A	A	A		A
BIT 3.10(a)	Sieve analysis of fine and coarse aggregates	ASTM C117-13 Procedure B & C136/C136M-14 with modifications		2112		A	A	A		A
BIT 3.11	Determination of bulk specific gravity and density of non-absorptive compacted dense bituminous paving materials	ASTM D2726-96a		2122		A	A	A		A
BIT 3.11(a)	Determination of bulk specific gravity, density and percent air voids of non-absorptive compacted dense bituminous/asphalt mixtures	ASTM D2726/2726M-14 and D3203/D3203M-17 with modifications		2122		A	A	A		A
BIT 3.12(a)	Determination of theoretical maximum S.G. (Rice's S.G.) of bituminous paving materials (with aggregate size smaller than 28mm) using Type A container, weighing in water method with modification	ASTM D2041-95		2112		A	A	A		A
BIT 3.12(b)	Determination of theoretical maximum S.G. (Rice's S.G.) of bituminous paving materials (with aggregate size greater than or equal to 28mm) using Type A container, weighing in water method with modification	ASTM D2041-95		2112		A	A	A		A
BIT 3.12(c)	Determination of theoretical maximum S.G. (Rice's S.G.) of bituminous paving mixtures (vacuum bowl, weighing in water method)	ASTM D2041/D2041M-11		2112		A	A	A		A
BIT 3.13	Determination of air void content of compacted bituminous paving materials	ASTM D3203-94		2122		A	A	A		A
BIT 3.14	*Determination of bitumen content of bituminous paving materials by ignition method*	*ASTM D6307-98*		2112		A	A	A		A
BIT 3.14(a)	*Determination of bitumen content of bituminous paving materials by ignition method*	*ASTM D6307-05*		2112		A	A	A		A
BIT 3.14(b)	*Determination of asphalt binder content of asphalt mixtures by ignition method*	*ASTM D6307-16*		2112		A	A	A		A
BIT 3.15	Determination of polymer modified binder content of bituminous paving materials by the combination of both centrifuge and ignition method	ASTM D2172-95 Method A, ASTM D6307-98 & Appendix 9.2 of Contract Particular Specification issued by Highways Department		2112		A	A	A		A
BIT 3.15 (a)	Determination of polymer modified asphalt binder content of asphalt mixtures by the combination of both centrifuge and ignition method	ASTM D2172-95 Method A, ASTM D6307-05 & Appendix 9.2 of Contract Particular Specification issued by Highways Department		2112		A	A	A		A
BIT 3.15(b)	Determination of polymer modified asphalt binder content of asphalt mixtures by the combination of both centrifuge and ignition method	ASTM D2172/D2172M-17 Method A and ASTM D6307-16 Method A in accordance with Contract Particular Specification issued by Highways Department		2112		A	A	A		A
BIT 3.17	Determination of bulk specific gravity of bituminous paving mixtures	ASTM D3203-94 & D3549-93a		2122		√	√	√		√
BIT 3.17(a)	*Determination of bulk specific gravity and percent air voids in compacted asphalt mixtures*	*ASTM D3203/D3203M-17 & D3549/D3549M-17*		2122		A	A	A		A
BIT 3.18(a)	Determination of bulk specific gravity, density and air void content of compacted bituminous paving mixtures using paraffin-coated specimens of 100mm diameter	ASTM D1188-96 & D3203-11 with modification		2122		√	√	√		√
BIT 3.18(b)	Determination of bulk specific gravity, density and air void content of compacted bituminous paving mixtures using paraffin-coated specimens of 150mm diameter	ASTM D1188-96 & D3203-11 with modifications		2122		√	√	√		√
BIT 3.19	Determination of air void content of compacted dense and open bituminous paving mixtures	ASTM D3203-11		2122		A	A	A	A	A
BIT 3.20	Determination of mechanical size analysis of extracted aggregate	ASTM D5444-98 with modifications		2112		A	A	A		A
BIT 3.20(a)	Determination of mechanical size analysis of extracted aggregate in accordance with ASTM D5444-15 with modifications	ASTM D5444-15 with modifications		2112		A	A	A		A
BIT 3.21	Sample preparation from extracted bitumen solution	Appendix AA Clause 9.2.3(f) to (j) of Contract Particular Specification issued by Highways Department		2112		√	√	√		√
BIT 3.21(a)	*Sample preparation from extracted bitumen solution*	*Appendix AA5 Clause 9.5.3(f) to (j) of Contract Particular Specification 2023 Edition issued by Highways Department*		2112						√
BIT 3.22	Recovery of asphalt from solution using the rotary evaporator	ASTM D5404 - 12		2112		∇				√
BIT 3.23	Determination of bulk specific gravity and density of compacted bituminous mixtures using automatic sealing method	ASTM D6752-11 with modifications		2122		A	A	A	A	A
BIT 3.23(a)	Determination of bulk specific gravity, density and percent air voids of compacted asphalt mixtures using automatic sealing method	ASTM D6752/D6752M-18 and D3203/D3203M-17 with modification		2122		A	A	A		A
BIT 3.24	Determination of the absorbance peak height ratio value by the attenuated total reflection (ATR) method using a fourier transform infrared (FTIR) spectrometer	AASHTO T302-15 with modifications		2112		√	√	√		√
BIT 3.24(a)	Determination of the Absorbance Peak Height Ratio Value by the Attenuated Total Reflection (ATR) Method Using a Fourier Transform Infrared (FTIR) Spectrometer	PS Appendix AA5 Clause 9.5.3 (f) to (s) of Contract Particular Specification 2024 Edition issued by Highways Department		2112						√
BIT 4.3	Determination of surface regularity by rolling straightedge	TRRL Supplementary Report 290		2115		√#	√#	√#	√#	√#
BIT 4.5	Determination of texture depth of carriageways	GS(1992/2006/2020) App. 10.1	10.57	2115		√#	√#	√#	√#	√#
BIT 4.8	Determination of permeability of friction course / polymer modified friction course	GS(1992/2006/2020) App. 9.1	9.62	2115		√#	√#	√#	√#	√#
BIT 4.9	Determination of longitudinal and transverse surface regularity of carriageways by 3 meter straightedge	GS(1992/2006/2020) Cl. 10.55(3)	10.55	2115		√#		√#	√#	√#

Building Blocks, bricks and concrete kerbs

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
BRK 2.1	Compressive strength of concrete blocks	BS6073:Part 1:1981 App. B		2323	√#					
BRK 2.3	Determination of characteristic compressive strength of interlocking blocks	App. 11.1 of GS 2006 Edition	11.85	2323	A				√	∇
BRK 2.3(a)	Determination of characteristic compressive strength of paving blocks	App. 11.1 of GS 2020 Edition		2323	A					
BRK 2.5	*Determination of dimensions and transverse breaking load of clay and calcium silicate pavers for flexible pavements*	*BS6677:Part 1: 1986 Appendix C and D*		2323	A#			∇		
BRK 2.6(b)	Determination of water absorption properties (cold water 24-h immersion test) of masonry units and segmental pavers	AS/NZS 4456.14:1997, AS/NZS 4456.2:1997 and Clause 11.88 (4) of GS 2006 Edition	11.88(4)	2323	A			∇		∇
BRK 2.6(c)	Determination of water absorption properties (cold water 24-h immersion test) of masonry units and segmental pavers	AS/NZS 4456.14:2003, AS/NZS 4456.2:2003 and Clause 11.88(4) of GS 2020 Edition	11.88(4)	2323	A					
BRK 2.7	Determination of dimensions for precast, unreinforced concrete paving blocks and complementary fittings	BS 6717:2001 Annex B: B1–B3		2323	A					
BRK 2.8	Determination of dimensions for precast, unreinforced concrete paving flags	BS 7263-1:2001 Annex B: B1-B3		2323	A#					
BRK 2.9	Determination of dimensions and transverse breaking load of clay pavers	Annex B and D of BS EN 1344:2002		2323	√#					
BRK 2.10	Determination of dimensions of concrete paving blocks	BS EN 1338:2003 Annex C:C.1-C.3		2323	A#					
BRK 2.11	Determination of dimensions of concrete paving flags	BS EN 1339:2003 Annex C:C.1-C.3		2323	A#					
BRK 2.12	Determination of dimensions and transverse breaking load of clay pavers	BS EN 1344:2013 Annex B and D		2323	√#					
BRK 2.13	Measurement of dimensions and determination of bending strength of precast concrete kerbs	BS EN 1340:2003 Annex C and F		2323				A	A	
BRK 3.2	Determination of bending strength of precast, unreinforced concrete or artificial granite paving flags	BS 7263-1:2001 Annex E		2323	A#					
BRK 3.3	Determination of dimensions for natural/artificial granite paving slabs	BS EN 1341:2001 Annex A: A.1-A.2 & A.4		2323	A#					
BRK 3.5	Determination of bending strength and breaking load of concrete paving flags	BS EN 1339:2003 Annex F		2323	A#					
BRK 5.1	*Determination of skid resistance value of clay and calcium silicate pavers for flexible pavements*	*BS6677:Part 1: 1986*		2323	√#			∇		
BRK 5.2	Determination of unpolished skid resistance value (USRV) of slabs of natural stone for external paving	BS EN 1341:2001 Annex D		2323	A#					
BRK 5.3	Determination of the frictional characteristics of new pedestrian surface materials under wet conditions (exclude carpets, ageing or wear testing procedures and in-situ testing)	Appendix A of AS 4586-2013		2323	A#					
BRK 5.4	Determination of unpolished skid resistance value (USRV) of concrete paving blocks	BS EN 1338:2003 Annex I		2323	√#					
BRK 5.5	*Determination of slip resistance value (SRV) of setts of natural stone for external paving in wet test condition*	*BS EN 14231:2003 Cl. 8.3 in conjunction with BS EN 1342:2012 Cl. 4.6.1*		2323	√#					
BRK 5.5(a)	Determination of unpolished skid resistance value (USRV) of setts of natural stone for external paving	BS EN 1342:2001 Annex C		2323	A#					
BRK 5.6	*Determination of unpolished slip/skid resistance value (USRV) of clay pavers*	*CEN/TS 16165:2012 Annex C in conjunction with BS EN 1344:2013 Cl. 4.2.5*		2323	√#					
BRK 5.6(a)	Determination of unpolished skid resistance value (USRV) of clay pavers	BS EN 1344:2002 Annex F		2323	A#					

Calibration

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
CAL 1.1	Verification of the grading of forces applied by uniaxial/universal/compression testing machines	BS1610:Part 1:1985			A					
CAL 1.1(a)	Load verification of uniaxial testing machine, using true/indicated force method, in compression/tension	BS EN ISO 7500-1:1999 BS EN ISO 7500-1:2004			A					
CAL 1.1(b)	Load verification of tensile testing machine, using true/indicated force method	BS EN 10002-2:1992			A					
CAL 1.1(c)	Verification of the forces measuring system of the tension/compression testing machines	BS EN ISO 7500-1:2018			A					
CAL 1.3	Performance verification of concrete compression machines by footemeter	BS1881:Part 115:1986 App. A/ CS1:1990 App. D BS EN 12390-4:2000 App.A/ CS1:2010 App.D			A					
CAL 1.5	Verification of the grading of forces applied by uniaxial compression testing machines	BS1610:Part 1:1992			A					
CAL 1.5(a)	Verification of the forces measuring system of the compression testing machines	Annex B of BS EN 12390-4:2000			A					
CAL 1.6	Calibration of force measuring device	GEOSPEC 3 Cl. A3			A					
CAL 1.10	Calibration of force measuring device (load cell)	In-house test method			A					
CAL 2.2	Calibration of pressure or vacuum gauges	In house test method based on BS EN837-1:1998 CL. 6, 9.1, 9.2 and 10.2			A					
CAL 2.4	Calibration of pressure measuring device	GEOSPEC 3 Cl. A3.2			A					
CAL 3.1 (a)	Calibration of extensometer	BS3846:1970			A					
CAL 3.1 (b)	*Calibration of circumferential extensometer*	*BS3846:1970*			A					
CAL 3.1 (f)	Calibration of extensometer	BSEN 10002-4:1995/BSEN ISO 9513 : 2002			A					
CAL 3.1 (g)	Calibration of extensometer in accordance with BS EN ISO 9513 : 2012	BS EN ISO 9513:2012			A					
CAL 3.2	Calibration of calipers	In-house test method			A					
CAL 3.3	Calibration of external micrometers	In-house test method			A					
CAL 3.4	Calibration of dial gauges	In-house test method			A					
CAL 3.5	Calibration of length measuring devices	In-house test method			A					
CAL 3.5(a)	Calibration of 3-Dimensional length measuring device	In-house test method			√					
CAL 3.9	*Calibration of lever system for the consolidation apparatus and direct shear apparatus*	*In-house test method*			√					
CAL 3.11	*Calibration of depth gauge*	*In-house test method*			√					
CAL 3.12	Calibration of scale rule	In-house test method			√					
CAL 3.13	Calibration of feeler gauge	In-house test method			√					
CAL 3.14	Calibration of measuring tape	In-house test method			√					
CAL 3.15	*Calibration of engineers' square*	*In-house test method based on 10.1, 10.2, 10.3, 10.4 & 10.8 of BS 939:1977*			√					
CAL 4.5	*Calibration of flatness and parallelism of platen surface*	*In-house test method*			√					
CAL 4.7	*Calibration of skid resistance tester*	*BS EN 1097-8:2000*			A					
CAL 4.7(a)	*Calibration of skid resistance tester*	*BS EN 14231:2003 / BS EN 1338:2003*			A					
CAL 4.7(b)	*Calibration of skid resistance tester*	*CEN/TS 16165:2012*			A					
CAL 6.1	Calibration of thermometers	In-house test method			A					
CAL 6.2	Verification of temperature range of constant temperature enclosures	In-house test method			√					
CAL 6.4	Calibration of high temperature enclosures	In-house test method			√					
CAL 6.5	Verification of infrared oven	In-house test method			√					
CAL 10.2	Calibration of masses	In-house test method			A					
CAL 10.3	Calibration of balances of capacity over 30 kg	In-house test method			√					
CAL 10.4	Calibration of balance	In-house test method			A					
CAL 20.1	Calibration of automatic volume change apparatus	Part II of Geospec 3			√					

Cement

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
CEM 0.0	Sample receipt for cement	In-house procedure			√					
CEM 1.6	*Tests for cement setting times*	*BS EN 196-3:1995 Cl. 6*		2322	A#					
CEM 1.7	*Determination of cement standard consistence*	*BS EN 196-3:1995 Cl. 5*		2322	A#					
CEM 1.8	*Cement soundness test*	*BS EN 196-3:1995 Cl. 7*		2322	A#					
CEM 1.9	*Cement density test*	*BS EN 196-6 : 1992 Annex NC*		2322	A#					
CEM 1.10	*Cement fineness test by blaine method*	*BS EN 196-6 : 1992 Cl. 4*		2322	A#					
CEM 1.11	Test for cement setting times	BS EN 196-3:2005+A1:2008 Cl. 6		2322	A					
CEM 1.12	Determination of cement standard consistence	BS EN 196-3:2005+A1:2008 Cl. 5		2322	A					
CEM 1.13	Cement soundness test	BS EN 196-3:2005+A1:2008 Cl. 7		2322	A					
CEM 1.14	Cement density test	BS EN 196-6: 2010 Annex NC		2322	A					
CEM 1.15	Cement fineness test by blaine method	BS EN 196-6: 2010 Cl. 4		2322	A					
CEM 2.3	*Determination of cement strength by flexural and compressive strength tests on prismatic specimens*	*BS EN 196-1:1995*		2322	A#					
CEM 2.4	Determination of cement strength by flexural and compressive strength tests on prismatic specimens	BS EN 196-1:2005		2322	A					

Chemical

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
CHM 0.0	Quality control manual for chemical testing unit	Quality manual			√					
CHM 0.1	Miscellaneous work instructions for chemical testing unit	Quality manual			√					
CHM 1.1	Determination of chloride content of admixture	BS5075:Part 1: 1982 Appendix E	16.10 & 16.51	2203	A^					
CHM 2.6	*Determination of water-soluble chloride content of aggregates*	*CS3:2013, Section 21.3*		2204	A^					
CHM 2.7	*Determination of acid-soluble sulphate content of aggregates*	*CS3:2013, Section 21.5*		2204	A^					
CHM 2.8	*Determination of total sulphur content of aggregates*	*CS3:2013, Section 21.6*		2204	A^					
CHM 2.9	*Determination of presence of humus*	*CS3:2013, Section 21.7*		2204	A^					
CHM 4.5	Determination of loss-on-ignition of cement	BS EN 196-2:2005, Cl. 7		2205	A^					
		BS EN 196-2:2013, Cl. 4.4.1		2205	√					
CHM 4.6	Determination of sulphate content of cement	BS EN 196-2:2005, Cl. 8		2205	A^					
		BS EN 196-2:2013, Cl. 4.4.2		2205	√					
CHM 4.7	Determination of residue insoluble in hydrochloric acid and sodium carbonate in cement	BS EN 196-2:2005, Cl. 9		2205	A^					
		BS EN 196-2:2013, Cl. 4.4.3		2205	√					
CHM 4.8	Determination of chloride content of cement	BS EN 196-2:2005, Cl. 14		2205	A^					
		BS EN 196-2:2013, Cl. 4.5.16		2205	√					
CHM 4.10	Determination of total alkali content of cement	BS EN 196- 2: 2005, Cl.17		2205	A^					
		BS EN 196-2:2013, Cl. 4.5.19		2205	√					
CHM 4.11	Determination of iron (III) oxide and aluminium oxide content of cement	BS EN 196-2: 2005, Cl 13.2, Cl 13.4, Cl 13.6.1, Cl 13.7, Cl 13.10 and Cl 13.11		2205	√					
CHM 5.3	Determination of chloride content in hardened concrete	CS1:2010 and CS1:1990 Section 21.10.2 and BS1881:Part124:1988		2206	A^					
CHM 5.4	Determination of sulphate content in hardened concrete	CS1: 2010 Section 21.10.3 and CS1:1990 Section 21.10.3		2206	A^					
CHM 5.8	Determination of cement content and aggregate content of hardened concrete	CS1: 2010 and CS1: 1990, section 21.6		2206	√					
CHM 5.9	*Determination of carbonation depth in hardened concrete by the phenolphthalein method*	*BS EN 14630: 2006*		2206	√					
CHM 6.5	Determination of total alkali content of pulverized-fuel ash	BS EN 196-2:2005, Cl. 17		2207	A^					
CHM 6.7	Determination of moisture content of pulverized-fuel ash	BS 3892: Part 1:1997 (Annex C)		2207	A^					
CHM 6.8	Determination of loss-on-ignition of pulverized-fuel ash	BS EN 196-2: 2005, Cl. 7		2207	A^					
		BS EN 196-2:2013, Cl. 4.4.1		2207	√					
CHM 6.9	Determination of sulphuric anhydride content of pulverized-fuel ash	BS EN 196-2: 2005, Cl. 8		2207	A^					
CHM 6.10	Determination of chloride content of pulverized-fuel ash	BS EN 196-2: 2005, Cl. 14		2207	A^					
CHM 6.11	Determination of calcium oxide content of pulverized-fuel ash	BS EN 196-2: 2005, Cl. 13.12		2207	A^					
CHM 7.1	Determination of total sulphate content of soil and sulphate content of groundwater and aqueous soil extracts by gravimetric method	Geospec 3:2017, Cl. 9.3	6.59	2208	A^					
CHM 7.2	Determination of water soluble chloride content of soil	Geospec 3:2017, Cl. 9.4		2208	A^					
CHM 7.3	Determination of pH value of soil and groundwater	Geospec 3:2017, Cl. 9.5		2208	A^					
CHM 7.4	Determination of organic matter content of soil	Geospec 3:2017, Cl. 9.1		2208	A^					
CHM 7.6	Determination of the mass loss of soil on ignition	Geospec 3:2017, Cl. 9.2		2208	A^					
CHM 8.3(b)	Gravimetric determination of the mass per unit area of hot dip galvanized coatings on steel wires	BS EN ISO 1460: 1995		2210	√					
CHM 8.4	Determination of carbon, sulphur, phosphorus, nitrogen, copper, manganese, chromium, molybdenum, vanadium and nickel content of steel by spark spectrometry	In-house test method		2209	A^					
CHM 8.5	*Determination of nitrogen content of steel*	*BS EN ISO 15351: 2010*		2209	A^					
CHM 8.6	*Determination of total carbon and sulphur content of steel by infrared absorption method after combustion in an induction furnace*	*In-house test method*		2209	A^					
CHM 8.7	Determination of zinc and zinc alloy coatings of steel wire	BS EN 10244-2: 2009		2210	√					
CHM 9.8	*Determination of chloride in water*	*APHA 21st Edition (2005) - Part 4500 - Cl- Section B*		2211	√					
CHM 11.4	Determination of moisture content of ground granulated blast furnace slag	BS EN 15167-1: 2006 (Annex A)		2212	√					
CHM 11.5	Determination of chloride content of ground granulated blast furnace slag	BS EN 196-2: 2005, Cl. 14		2212	√					
CHM 11.6	Determination of sulphate content of ground granulated blast furnace slag	BS EN 196-2: 2005, Cl. 8		2212	√					
CHM 11.7	Determination of loss-on-ignition of ground granulated blast furnace slag	BS EN 196-2: 2005, Cl. 7		2212	√					
CHM 11.8	Determination of magnesium oxide content of ground granulated blast furnace slag	BS EN 196-2: 2005, Cl. 13.13		2212	√					
CHM 11.9	Determination of sulphide content of ground granulated blast furnace slag	BS EN 196-2: 2005, Cl. 11		2212	√					
CHM 11.10	*Determination of total alkali content of ground granulated blast furnace slag*	*BS EN 196-2:2005, Cl. 17 / BS EN 196-2:2013, Cl. 4.5.19*		2212	√					
CHM 15.1	*Determination of organic matter content of glass cullet*	*Geospec 3, Cl. 9.1*		2213	√					

Concrete

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
CON 2.6	Measurement of dimensions & determination of transverse strength of precast concrete kerbs	BS7263:Part 1:1994 Annex A and Annex B	11.51	2324	A#			√#	√#	
CON 2.9	Compression test of concrete cubes and cement grout cubes	CS1:2010 Section 10, 12 & 16	16.58	2309	A	A	A	A	A	A
CON 2.10(a)	Compressive strength of concrete cores to CS1:2010 (for 100 mm diameter size)	CS1:2010 Section 15	16.63	2313	A			A	A	A
CON 2.10(b)	*Compressive strength of concrete cores to CS1:2010 (for 150 mm diameter size)*	*CS1:2010 Section 15*	*16.63*	2313	A			A	A	A
CON 2.11	Determination of tensile splitting strength of cylindrical concrete	CS1:2010, Vol. 2:Section 13		2324	A			√	A	A
CON 2.12	*Determination of flexural strength of concrete beams*	*CS1:2010:Section 14*		2324	A#					
CON 5.8	*Determination of water absorption of concrete*	*BS1881:Part 122:1983*		2324	√#			▽	√#	
CON 5.12	Determination of concrete's ability to resist chloride ion penetration	CS1:2010, V2, Sect 19		2324	A#					
CON 5.15	*Determination of the bending strength of wall panels*	*AS/NZS 2908.2:2000*		2324	√#					
CON 6.5	Surface hardness testing by rebound hammer	BS1881:Part 202:1986		2324			√		√	
CON 6.5(a)	*Determination of rebound number of an area of hardened concrete using a spring-driven hammer*	*BS EN 12504-2:2021*		2324			√		√	√

Geotextile

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
GTL 2.1	Determination of tensile properties of geotextile by the wide-width strip method	ASTM D4595-86		2404	√#					

Ground Granulated Blast Furnace Slag

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
GGB 0.0	Sample receipt of GGBS	In-house procedure			√					
GGB 1.1	*Determination of activity index*	*BS EN 196-1:1995 Cl. 9.3 in conjunction with BS EN 15167-1:2006 Cl. 5.3.2.3*		2326	A#					
GGB 1.2	*Determination of standard consistence*	*BS EN 196-3:1995 Cl. 5 in conjunction with BS EN 15167-1:2006 Cl. 5.3.2.2*		2326	A#					
GGB 1.3	*Determination of initial setting time*	*BS EN 196-3:1995 Cl. 6.1 and 6.2 in conjunction with BS EN 15167-1:2006 Cl. 5.3.2.2*		2326	A#					
GGB 1.4	*Determination of particle density*	*BS EN 196-6:1992 Annex NC in conjunction with BS EN 15167-1:2006 Cl. 5.5g*		2326	A#					
GGB 1.5	*Fineness test by blaine method*	*BS EN 196-6:1992 Cl. 4 in conjunction with BS EN 15167-1:2006 Cl. 5.3.1*		2326	A					
GGB 1.6	Determination of activity index of ground granulated blast furnace slag (GGBS)	BS EN 196-1:2005 Cl. 9.2 in conjunction with BS EN 15167-1:2006 Cl. 5.3.2.3		2326	A					
GGB 1.7	Determination of standard consistence for ground granulated blast furnace slag (GGBS)	BS EN 196-3:2005+A1:2008 Cl. 5 in conjunction with BS EN 15167-1:2006 Cl. 5.3.2.2		2326	A#					
GGB 1.8	Determination of initial setting time of ground granulated blast furnace slag (GGBS)	BS EN 196-3:2005+A1:2008 Cl. 6.1 and 6.2 in conjunction with BS EN 15167-1:2006 Cl. 5.3.2.2		2326	A					
GGB 1.9	Determination of particle density for ground granulated blast furnace slag (GGBS) for use with portland cement	BS EN 196-6:2010 Annex NC in conjunction with BS EN 15167-1:2006 Cl. 5.5g		2326	A					
GGB 1.10	Ground granulated blast furnace slag (GGBS) fineness test by blaine method	BS EN 196-6:2010 Cl. 4 in conjunction with BS EN 15167-1:2006 Cl. 5.3.1		2326	A#					

Miscellaneous tests

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
MIS 2.1	Determination of skid resistance value of road surface in accordance with guidance notes on road testing (RD/GN/009) issued by highways department	Guidance Notes on Road Testing (RD/GN/009)		2124			√#	√#	√#	
MIS 4.1	Determination of extrusion of joint filler	GS(2006) with amendment 2/2013		2417	√#					
MIS 4.1(a)	*Determination of extrusion of joint filler*	*Appendix 16.3 of GS 2020*		2417	√#					
MIS 4.2	Weathering test of joint filler	In-house method		2417	√#					
MIS 4.3	Determination of the recovery value and reduction in mass of joint filler	GS(2006) with amendment 2/2013		2417	√#					
MIS 4.3(a)	*Determination of the recovery value and reduction in mass of joint filler*	*Appendix 16.3 of GS 2020*		2417	√#					
MIS 5.1	*Determination of length of installed steel soil nail, steel bar anchor or steel wire rope anchor with a pre-installed wire by the use of time domain reflectometry (TDR) cable fault locator*	*In-house method*			√					
MIS 6.1	*Determination of head injury criterion value for impact absorbing playground surfacing*	*BS EN 1177:1998*			√					
MIS 7.1	Measurement of coating thickness by magnetic method	BS EN ISO 2178: 1995		2411				√	√	√
MIS 7.1(a)	Measurement of coating thickness by magnetic method	BS EN ISO 2178: 2016 in conjunction with BS EN ISO 1461:2009		2428				A	A	A
MIS 10.1	Unconfined compression test of cement soil cores	Interim Guidelines on Testing of Unconfined Compressive Strength of Cement Stabilised Soil Cores in Hong Kong (October 2017, HKIE)		2601	A					
MIS 10.1(a)	*Unconfined compressive strength of cement stabilised soil cores*	*GEO Report No. 365 (2023) App. A*		2601	A					
MIS 12.1	*Determination of afterflame time and afterglow time of vertically oriented specimens of fall protection-safety nets*	*GB 5725–2009 Cl. 5.2.2.9 and GB 5725–2025 Cl. 5.5.2 & 5.5.3, with sample conditioned as specified under GB/T 5455-2014 Cl. 7.3*		2431	√	√	√	√		√
MIS 12.2	*Determination of burning behaviour of vertically oriented specimens of fall protection-safety nets*	*GB/T 5455–2014 in conjunction with GB 5725–2009 Cl. 5.2.2.9 and GB 5725–2025 Cl. 5.5.2 & 5.5.3*		2431	√					

PFA

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
PFA 0.0	Sample receipt for pulverised-fuel ash (PFA)	In-house procedure			√					
PFA 1.3	Determination of fineness of pulverised-fuel ash (PFA)	BS 3892:Part 1:1997 Annex D in conjunction with BS 3892:Part 1: 1997 Clause 6		2325	A					
PFA 1.4	Determination of water requirement of pulverised-fuel ash (PFA)	BS 3892:Part 1:1997 Annex E with modification in conjunction with BS 3892: Part 1: 1997 Clause 8 with modification		2325	A					
PFA 1.5	Determination of particle density of pulverized-fuel ash (PFA)	BS EN 196-6: 1992 Annex NC in conjunction with BS 3892:Part 1:1997 Clause 7		2325	A					
PFA 1.6	Determination of initial setting times of pulverized-fuel ash (PFA)	BS EN 196-3:1995 in conjunction with BS 3892:Part 1:1997 Clause 10 with modification		2325	A					
PFA 1.7	Determination of standard consistence of pulverized-fuel ash (PFA)	BS EN 196-3:1995 in conjunction with BS 3892:Part 1:1997 Clause 10 with modification		2325	A					
PFA 1.8	Determination of soundness of pulverized-fuel ash (PFA)	BS EN 196-3:1995 in conjunction with BS 3892:Part 1:1997 Clause 11 with modification		2325	A					
PFA 1.9	Determination of strength factor of pulverised-fuel ash (PFA)	BS 3892:Part 1:1997 Annex F with modification in conjunction with BS 3892:Part 1:1997 Clause 9 with modification		2325	A					
PFA 1.10	*Determination of fineness of pulverized-fuel ash (PFA)*	*BS EN 451-2:2017 in conjunction with BS EN 450-1:2012 Cl. 5.3.1*		2325	√#					
PFA 1.11	*Determination of water requirement of pulverized-fuel ash (PFA) for use with Portland cement*	*BS EN 450-1:2012 Annex B in conjunction with BS EN 450-1:2012 Cl. 5.3.6*		2325	√#					
PFA 1.12	*Determination of particle density of pulverized-fuel ash (PFA)*	*BS EN 1097-7:2008 in conjunction with BS EN 450-1:2012 Cl. 5.3.4 with modification*		2325	√#					
PFA 1.13	*Determination of initial setting times of pulverized-fuel ash (PFA) for use with Portland cement*	*BS EN 196-3:2005+A1:2008 Cl. 6.1 and 6.2 in conjunction with BS EN 450-1:2012 Cl. 5.3.5*		2325	√#					
PFA 1.14	*Determination of standard consistence of pulverized-fuel ash (PFA) for use with Portland cement*	*BS EN 196-3:2005+A1:2008 Cl. 5 in conjunction with BS EN 450-1:2012 Cl. 5.3.5*		2325	√#					
PFA 1.15	*Determination of soundness of pulverized-fuel ash (PFA) for use with Portland cement*	*BS EN 196-3:2005+A1:2008 Cl. 7 in conjunction with BS EN 450-1:2012 Cl. 5.3.3*		2325	√#					
PFA 1.16	*Determination of activity index of pulverized-fuel ash (PFA) for use with Portland cement*	*BS EN 196-1:2005 Cl. 9 in conjunction with BS EN 450-1:2012 Cl. 5.3.2*		2325	√#					

Pipes

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
PIP 1.1(b)	*Water absorption of vitrified clay pipe*	*BS 65:1991 Cl. F.1 and F.2 in conjunction with BS 65:1991 Cl. 6.6.1*	*5.82*	2427	A#					
PIP 1.1(d)	Determination of water absorption of precast concrete street gullies / inspection chambers and watertightness of precast concrete street gullies	BS5911: Part 2:1982		2427	A#					
PIP 1.4	Heat reversion test for unplasticized polyvinyl chloride (UPVC) pipes (up to 16" nominal size)	BS 3506:1969 App. A in conjunction with BS 3506:1969 Cl. 8.2		2427	A#					
PIP 1.5	Determination of water absorption of precast concrete pipes and fittings	BS EN 1916:2002 Annex F in conjunction with BS EN 1916:2002 Cl. 4.2.6.2		2427	A#					
PIP 1.6	Heat reversion test for unplasticized PVC soil and ventilating pipes	BS 2782-11:Method 1102B:1981 in conjunction with BS 4514:1983 Cl. 5.4		2427	A#					
PIP 1.7	Heat reversion test for unplasticized polyvinyl chloride (PVC-U) pipes for below ground gravity drainage and sewerage	BS 2782-11:Method 1102B:1981 in conjunction with BS 4660:1989 Cl. 6.4		2427	A#					
PIP 1.8	heat reversion test for unplasticized PVC pipes for gravity sewers (up to 400 mm nominal size)	BS 5481:1977 App. A in conjunction with BS 5481:1977 Cl. 8.1.4		2427	A#					
PIP 1.9	Determination of Longitudinal Reversion for Unplasticized Poly(Vinyl Chloride) (PVC-U) Pipes (up to the Nominal Outside Diameter of 400 mm)	EN ISO 2505:2005 (by Air Oven) in conjunction with BS EN 1401-1:2009 Cl. 8.1		2427	√#					
PIP 1.10	Determination of Longitudinal Reversion for Unplasticized Poly(Vinyl Chloride) (PVC-U) Pipes	EN 743:1994 (Method B) in conjunction with BS EN 12200-1:2000 Cl. 8.1		2427	√#					
PIP 2.1(b)	*Crushing strength test on vitrified clay pipe*	*BS65:1991*	*5.82*	2427	√#					
PIP 2.1(c)	*Determination of crushing strength of vitrified clay pipe*	*BS EN 295:Part 3:1991*		2427	√#					
PIP 2.1(f)	Determination of crushing strength of vitrified clay pipes (up to 900 mm nominal size)	BS EN 295-3:2012 Cl. 7 in conjunction with BS EN 295-1:2013 Cl. 5.9		2427	A#					
PIP 2.2	Impact Strength Test for unplasticized PVC Pipes for Industrial Uses (from 2" to 16" nominal size)	BS 3506:1969 App. E in conjunction with BS 3506:1969 Cl. 9.2		2427	A#					
PIP 2.4	Determination of crushing strength of precast concrete pipes and fittings (up to 900 mm diameter)	BS EN 1916:2002 Annex C in conjunction with BS 5911-1:2002+A2:2010 Cl. 5.6		2427	A#					
PIP 2.5	Impact resistance test for unplasticized PVC soil and ventilating pipes	BS 4514:1983 App. B in conjunction with BS 4514:1983 Cl. 5.3		2427	A#					
PIP 2.6	Impact resistance test for unplasticized polyvinyl chloride (PVC-U) pipes for below ground gravity drainage and sewerage	BS 2782-11:Method 1108A:1989 in conjunction with BS 4660:1989 Cl. 6.3		2427	A#					
PIP 2.7	Impact resistance test for the unplasticized PVC pipes for gravity sewers (up to 400 mm nominal size)	BS 5481:1977 App. G in conjunction with BS 5481:1977 Cl. 8.1.3		2427	A#					
PIP 2.8	Determination of Impact Resistance (Round-the-Clock Method) for Unplasticized Poly(Vinyl Chloride) (PVC-U) Pipes (up to the Nominal Outside Diameter of 400 mm)	EN 744:1995 in conjunction with BS EN 1401-1:2009 Cl. 7.1.1		2427	√#					
PIP 2.9	Determination of Impact Resistance (Round-the-Clock Method) for Unplasticized Poly(Vinyl Chloride) (PVC-U) Pipes	EN 744:1995 in conjunction with BS EN 12200-1:2000 Cl. 7.1		2427	√#					

Rock

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
ROC 1.1(a)	*Preparation of thin sections (28 mm x 48 mm)*	*In-house test method*			√					
ROC 1.2	Preparation of rock core specimens and determination of dimensional and shape tolerances	ASTM D4543-91 with modifications			A					
ROC 2.1	*Determination of water content*	*ASTM D2216-98*			√					
ROC 2.2	Determination of porosity/density using saturation and caliper techniques	ISRM suggested method (1981) with modifications			√					
ROC 2.8	Point load strength index of rock by diametral and axial tests	ASTM D5731-95		2513	A					
ROC 2.9	Determination of cerchar abrasiveness index by cerchar scratch test	ASTM D7625-10 with modifications			A					
ROC 3.2	Unconfined compressive strength of intact rock core specimens	ASTM D2938-95 with modification		2513	A					
ROC 3.5	*Determination of elastic moduli of intact rock core specimens in uniaxial compression*	*ASTM D3148-96 with modification*		2513	A					
ROC 3.6	*Determination of direct shear strength of rock discontinuities under constant normal force*	*ASTM D5607-95 with modifications*			A					

Rubber compounds

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
RUB 1.3	Determination of density of non-cellular plastics	Method 620A of BS2782:Part 6:1991/ISO 1183:1987		2424	√#					
RUB 1.3(a)	Determination of density of non-cellular plastics by immersion method	BS EN ISO 1183-1:2012 Cl. 5.1 Method A with modification		2424	A#					
RUB 2.1	*Hardness (IRHD) test*	*BS903:Part A26:1995*	*16.91*	2424	√#					
RUB 5.1	Determination of flexural properties of plastic fender	Appendix 21.1 of GS 2006		2424	A#					
RUB 5.1(a)	*Determination of flexural properties of plastic fender*	*Appendix 21.1 of GS 2020*		2424	√#					

Soils

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
SOL 1.1(b)	*Procedures for the longitudinal splitting of mazier sample tube*	*In-house method*			√					
SOL 2.18	*Determination of soil moisture content by infrared oven drying*	*Geospec 3: 2017-Test Method 5.2 with modifications*	*Appendix 6.5*	2510	A	A	A	A	A	A
SOL 8.4	Determination of in-situ california bearing ratio (CBR)	BS 1377: Part 9:1990 Method 4.3 with modification		2511				√#	√#	√#
SOL 8.7	*Determination of penetration resistance of soil using dynamic probe (GEO Probe)*	*GS(2006) App. 7.1*		2511				√	√	
SOL 8.9	*Determination of the maximum converted bulk density and the relative compaction by the Hilf Method*	*Appendices 6.3 and 6.4 of GS 2020 Edition*		2511						√

Soils - Geospec

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
GSP 5.1	Determination of moisture content by oven-drying at 45ºC ± 5ºC	Geospec 3:2017 - Test Method 5.1	6.65	2510	A	A	A	A	A	A
GSP 5.2	Determination of moisture content by oven-drying at 105ºC ± 5ºC	Geospec 3:2017 - Test Method 5.2	6.65	2510	A	A	A	A	A	A
GSP 5.3	Comparative test for determination of moisture content by oven-drying	Geospec 3:2017 - Test Method 5.3		2510	A	A	A	A	A	A
GSP 6.1	Determination of liquid limit, plastic limit and plasticity index	Geospec 3:2017 - Test Method 6.1	6.59	2510	A	A	A	A	A	A
GSP 6.2	Determination of liquidity index	Geospec 3:2017 - Test Method 6.2		2510	A	A	A	A	A	A
GSP 7.1	*Determination of particle density by gas jar method*	*Geospec 3:2017 - Test Method 7.1*			A	∇	∇	∇	∇	
GSP 7.2	Determination of particle density by small pyknometer	Geospec 3:2017 - Test Method 7.2			A	∇	∇	∇	∇	
GSP 8.1	Determination of particle size distribution by wet sieving (with dispersant)	Geospec 3:2017 - Test Method 8.1	6.59	2510	A	A	A	A	A	A
GSP 8.2	Determination of particle size distribution by wet sieving (without dispersant)	Geospec 3:2017 - Test Method 8.2	6.59	2510	A	A	A	A	A	A
GSP 8.5	Determination of particle size distribution by hydrometer(with dispersant)	Geospec 3:2017 - Test Method 8.5		2510	A	A	A	A	A	A
GSP 8.6	Determination of particle size distribution by hydrometer (without dispersant)	Geospec 3:2017 - Test Method 8.6		2510	A	A	A	A	A	A
GSP 8.7	Construction of a continuous particle size distribution curve	Geospec 3:2017 - Test Method 8.7		2510	A	A	A	A	A	A
GSP 8.8	Determination of particle size distribution of fill material	Geospec 3:2017 - Test Method 8.1/8.2	6.72(3)	2510		A	A	A	A	A
GSP 10.1	Determination of dry density/moisture content relationship of soils containing particles which are not susceptible to crushing (1000cc mould and 2.5kg rammer)	Geospec 3:2017 - Test Method 10.1	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.2	Determination of dry density/moisture content relationship of soils containing particles which are susceptible to crushing (1000cc mould and 2.5kg rammer)	Geospec 3:2017 - Test Method 10.2	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.3	Determination of dry density/moisture content relationship of soils containing particles which are not susceptible to crushing (CBR mould and 2.5kg rammer)	Geospec 3:2017 - Test Method 10.3	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.4	Determination of dry density/moisture content relationship of soils containing particles which are susceptible to crushing (CBR mould and 2.5kg rammer)	Geospec 3:2017 - Test Method 10.4	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.5	Determination of dry density/moisture content relationship of soils containing particles which are not susceptible to crushing (1000cc mould and 4.5kg rammer)	Geospec 3:2017 - Test Method 10.5	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.6	Determination of dry density/moisture content relationship of soils containing particles which are susceptible to crushing (1000cc mould and 4.5kg rammer)	Geospec 3:2017 - Test Method 10.6	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.7	*Determination of dry density/moisture content relationship of soils containing particles which are not susceptible to crushing (CBR mould and 4.5kg rammer)*	*Geospec 3:2017 - Test Method 10.7*	6.62	2510 / 2511	A	A	A	A	A	A
GSP 10.8	Determination of dry density/moisture content relationship of soils containing particles which are susceptible to crushing (CBR mould and 4.5kg rammer)	Geospec 3:2017 - Test Method 10.8	6.62	2510 / 2511	A	A	A	A	A	A
GSP 11.1	Determination of in-situ bulk density and in-situ dry density of soils by the sand replacement method (with small pouring cylinder)	Geospec 3:2017 - Test Method 11.1	6.68	2511		A#	A#	A#	A#	A#
GSP 11.2	Determination of in-situ bulk density and in-situ dry density of soils by the sand replacement methods (with large pouring cylinder)	Geospec 3:2017 - Test Method 11.2	6.68	2511		A#	A#	A#	A#	A#
GSP 11.3	Determination of in-situ bulk density of soils by nuclear densometer	Geospec 3:2017 - Test Method 11.3	6.68	2511		√#		√#	√#	
GSP 11.3(a)	*Determination of in-situ bulk density and in-situ dry density of soil by nuclear densometer method for fine-, medium- and coarse- grained soils*	*In-house test method*		2511		√#		√#	√#	√#
GSP 11.4	Determination of relative compaction of fill materials	Geospec 3:2017 - Test Method 11.4	6.68, 9.44	2511		A	A	A	A	A
GSP 11.4(a)	*Determination of relative compaction of fill material*	*In-house test method*		2511		√		√	√	√
GSP 12.1	*Determination of california bearing ratio (CBR)*	*Geospec 3:2017 - Test Method 12.1*			A					
GSP 14.1	The one-dimensional consolidation test	Geospec 3:2017 - Test Method 14.1			A					
GSP 14.2	*The isotropic compression test in a triaxial cell*	*Geospec 3:2017 - Test Method 14.2*			A					
GSP 15.1	*The unconsolidated undrained triaxial compression test without pore pressure measurement*	*Geospec 3:2017 - Test Method 15.1*			A					
GSP 15.2(a)	The isotropically consolidated undrained triaxial compression test with pore pressure measurement (single-stage)	Geospec 3:2017 - Test Method 15.2			A					
GSP 15.2(b)	The isotropically consolidated undrained triaxial compression test with pore pressure measurement (multi-stage)	Geospec 3:2017 - Test Method 15.2			A					
GSP 15.3	*The isotropically consolidated drained triaxial compression test with measurement of volume change*	*Geospec 3:2017 - Test Method 15.3*			A					
GSP 15.4(a)	The isotropically consolidated undrained triaxial compression test with pore pressure measurement of loosely compacted fill	Geospec 3:2017 - Test Method 15.2 with modification			A					
GSP 15.5	*Constant-q stress path test*	*In-house test method*			√					
GSP 16.1	*The direct shear test (small shear box apparatus)*	*Geospec 3:2017 - Test Method 16.1*			A					
GSP 16.2	The direct shear test (large shear box apparatus)	Geospec 3:2017 - Test Method 16.2 with modification			A					
GSP 16.3	*Determination of friction between fill material and reinforcement elements*	*Geospec 3:2017 - Test Method 16.2 with modifications based on Geoguide 6*			√					

Steel and other metals

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
STE 0.0	Reception of steel bar, wire and fabric	In-house procedure			√					√
STE 1.9	*Determination of mass per unit length of steel bars*	*CS2:1995*		2403	A#					
STE 1.10	*Determination of tensile properties of steel bars*	*CS2:1995*		2403	A#					
STE 1.11	*Cold bend tests of steel bars*	*CS2:1995*		2403	A#					
STE 1.12	*Rebend tests of steel bars*	*CS2:1995*		2403	A#					
STE 1.17	*Determination of mass per unit length of steel reinforcing bars*	*BS 4449:2005+A2:2009*		2403	√					
STE 1.18	*Determination of tensile properties of steel reinforcing bars*	*BS 4449:2005+A2:2009*		2403	√					
STE 1.19	*Rebend test of steel reinforcing bars*	*BS 4449:2005+A2:2009*		2403	√					
STE 1.20	*Determination of mass per unit length of stainless steel bars*	*BS 6744:2001+A2:2009*		2423	√#					
STE 1.21	*Determination of tensile properties of stainless steel bars*	*BS 6744:2001+A2:2009*		2423	√#					
STE 1.22	*Bend test of stainless steel bars*	*BS 6744:2001+A2:2009*		2423	√#					
STE 1.23	Determination of mass per unit length of steel reinforcing bars	CS2:2012 (Rev. 6) Cl. 6.1 & 6.2		2403	A					A
STE 1.24	Determination of tensile properties of steel reinforcing bars	BS EN ISO 6892-1:2009 in conjunction with CS2:2012 (Rev. 6) Cl. 6.1 & 6.4		2403	A					A
STE 1.24(a)	Determination of tensile properties of steel reinforcing bars	BS EN ISO 6892-1:2009 in conjunction with CS2:2012 (Rev. 6) Cl. 6.1 & 6.4 with Modification		2403						A
STE 1.25	Rebend test of steel reinforcing bars	CS2:2012 (Rev. 6) Cl. 6.1 & 6.5		2403	A					A
STE 1.26	Determination of the surface geometry (relative rib area only) of ribbed steel reinforcing bars	CS2:2012 (Rev. 6) Cl. 6.1 & 6.7 excluding 6.7.3		2403	A					A
STE 2.5	*Determination of mass, pitch and wire dimension of steel fabric*	*BS4483:1998*	*Table 15.2*	2421	√					
STE 2.6	*Determination of tensile properties of steel fabric*	*BS4483:1998*	*Table 15.2*	2421	√					
STE 2.7	*Rebend test of steel fabric*	*BS4483:1998*	*Table 15.2*	2421	√					
STE 2.8	*Weld shear test of steel fabric*	*BS4483:1998*	*Table 15.2*	2421	√					
STE 2.9	Determination of mass and pitch of steel fabric	BS4483:2005 Cl. 7.3 & General Specification for Civil Engineering Works (2020) + Amd. 1/2025 Vol. 2 Section 15		2421	A					
STE 2.10	Determination of tensile properties of steel fabric	BS EN ISO 6892-1:2019 Cl. 10.3.3 Method B & BS EN ISO 15630-2:2019 Cl. 5 in conjunction with BS4483:2005 Cl. 7.2.2, 7.2.3, 8.1.3.1 & 9		2421	A					
STE 2.11	Rebend test of steel fabric	BS EN ISO 15630-1:2019 Cl. 7 in conjunction with BS4483:2005 Cl. 7.2.2, 7.2.5, 8.1.3.2 & 9		2421	A					
STE 2.12	Weld shear test of steel fabric	BS EN ISO 15630-2:2019 Cl. 7 in conjunction with BS4483:2005 Cl. 7.2.2, 7.2.4, 8.1.3.2 & 9		2421	A					
STE 3.1	*Determination of mass per unit length of cold reduced steel wires*	*BS4482:1985 Sect 5*	*15.03 & 15.31*	2423	√#					
STE 3.2	*Determination of tensile properties of cold reduced steel wires*	*BS4482:1985 Sect 12*	*15.03 & 15.31*	2423	√#					
STE 3.3	*Rebend test of cold reduced steel wires*	*BS4482:1985 Section 12.2 with modification*	*15.03 & 15.31*	2423	√#					
STE 3.6	Determination of actual diameter and actual breaking load of stranded steel wire ropes	BS 302-1:1987 Appendices A and B		2430	A#					
STE 3.7	Mechanical testing of mild steel wire	BS 1052:1980		2430	√#					
STE 3.8	*Determination of mass per metre of steel wires*	*BS4482:2005 Cl. 7.3*		2423	√#					
STE 3.9	*Determination of tensile properties of steel wires*	*ISO 6892-1:1998 & BS EN ISO 15630-1:2002 Cl.5 in conjunction with BS4482:2005 Cl. 7.2.2, 7.2.3 & 9*		2423	√#					
STE 3.10	*Rebend test of steel wires*	*BS EN ISO 15630-1:2002 Cl.7 in conjunction with BS4482:2005 Cl. 7.2.2, 7.2.4 & 9 with modification*		2423	√#					
STE 4.2	*Determination of tensile properties of steel sections*	*BS4360:1986*	*18.04 & 19.07*	2420	A					
STE 4.5	Determination of tensile properties of steel tube	BS 18-4:1971 in conjunction with BS 1387:1985 Cl. 3.2		2420	A#					
STE 4.7	Determination of tensile properties of structural steel	BS EN 10025-1:2004		2420	A					
STE 4.9	Determination of tensile properties of hot finished structural hollow sections of non-alloy and fine grain steels, cold formed welded structural hollow sections of non-alloy and fine grain steels	BS EN 10210-1:2006 BS EN 10219-1:2006		2420	A					
STE 4.10	Determination of tensile properties of hot rolled sheet piling of non alloy steels	BS EN 10248-1:1996		2420	√#					
STE 4.11	Determination of tensile properties of metallic materials	BS EN 10002-1:2001		2420	A#					
STE 4.12	Determination of tensile properties of stainless steel sheet/plate and strip Determination of tensile properties of stainless steel bars, rods, wire, sections	BS EN 10002-1:2001 in conjunction with BS EN 10088-2:2005 Cl. 7.4.2 BS EN 10002-1:2001 in conjunction with BS EN 10088-3:2005 Cl. 7.4.2		2420	A#					
STE 4.13	Determination of tensile properties of metallic materials	BS EN ISO 6892-1:2019		2420	A					
STE 4.14	Determination of tensile properties of non-alloy steel tubes (for Specified outside diameter between 10.2 mm and 60.3 mm)	BS EN 10002-1:2001 in conjunction with BS EN 10255:2004 Cl. 9.3		2420	A#					
STE 4.15	Determination of tensile properties of stainless steel sheet/plate and strip / Determination of tensile properties of stainless steel bars, rods, wire and sections	BS EN ISO 6892-1:2019 in conjunction with BS EN 10088-2:2014 Cl. 7.4.2 / BS EN ISO 6892-1:2019 in conjunction with BS EN 10088-3:2014 Cl. 7.4.2		2420	A#					
STE 5.1	Determination of dimensions and mass per unit length of 7-wire strands	BS5896:1980 Clause 24.2	17.06	2430	A					
STE 5.1(a)	Determination of straightness and deviation from nominal mass per metre of 7-wire strand	BS EN ISO 15630-3:2019 Cl. 14.3.4 & 16 in conjunction with BS 5896:2012 Cl.7.2.1 & 9		2430	A					
STE 5.2(b)	Determination of tensile properties of 7-wire strands (using clip on extensometer)	BS5896:1980 Sect A5	17.06	2430	A					
STE 5.2(c)	Determination of tensile properties of 7-wire strand	BS EN ISO 6892-1:2019 Cl. 10.3.3 Method B & BS EN ISO 15630-3:2019 Cl. 5 in conjunction with BS 5896:2012 Cl. 7.2.2 & 9		2430	A					
STE 6.1	Determination of mass of manhole covers and gully gratings	Cl. 5.95 of GS 2006		2405	A#					
STE 6.1(a)	*Determination of mass of manhole covers, gully gratings and kerb overflow weirs*	*Cl. 5.95 of GS 2020*		2405	√#					
STE 6.2	Determination of resistance to fracture of manhole covers and gully gratings	Cl. 5.95 and Appendix 5.3 of GS 2006		2405	A#					
STE 6.2(a)	*Determination of resistance to fracture of manhole covers and gully gratings*	*Cl. 5.95 and Appendix 5.3 of GS 2020*		2405	√#					
STE 6.3	Bending test of manhole steps	BS 1247-1:1990 App. A	5.26	2422	A					
STE 6.3(a)	Vertical loading test of steps for underground man entry chambers	BS EN 13101:2002 Annex B in conjunction with BS EN 13101:2002 Cl. 4.3.7		2422	A#					
STE 6.4	Twist test of manhole steps	BS 1247-1:1990 Cl. 7.1	5.26	2422	A					
STE 6.4(a)	Twist test of steps for underground man entry chambers	BS EN 13101:2002 Annex A in conjunction with BS EN 13101:2002 Cl. 4.3.6		2422	A#					
STE 6.5	Pull-out test of manhole steps	BS 1247-1:1990 App. B	5.26	2422	A					
STE 6.5(a)	Pull out test of steps for underground man entry chambers	BS EN 13101:2002 Annex D in conjunction with BS EN 13101:2002 Cl. 4.3.9		2422	A#					
STE 6.11	Determination of the ultimate breaking load of bolts / screws / thread rod and nuts	In-house test method		2418	√#					
STE 6.12	*Determination of the Tensile Properties of Corrosion-resistant Stainless Steel Fasteners (from M8 to M39 nominal size)*	*ISO 82:1974 and ISO 898-1:1978 in conjunction with BS 6105:1981 Cl. 6.1 to Cl. 6.4*		2418	√#					
STE 6.13	Proof load test for ISO metric precision hexagon steel nuts	BS 3692 : 1967 Appendix E.1 to E.3		2418	A#					
STE 6.13(a)	Proof load test for ISO metric precision hexagon steel nuts	BS 3692: 2001 Annex C.1 to C.3		2418	A#					
STE 6.14	Permanent elongation test and tensile test of reinforcement connectors for tension joints	BS EN ISO 6892-1: 2009 Cl. 10.4 Method B & ISO 15835-2:2018 Cl. 5.4 excluding Cl. 5.4.4 in conjunction with GS (2006) Vol. 2 Cl. 15.35 and COP for Structural Use of Concrete (2004) Cl. 3.2.8.2	15.35	2413	A					
STE 6.14(a)	Permanent elongation test and tensile test of reinforcement connectors for tension joints	BS EN ISO 6892-1: 2009 Cl. 10.4 Method B & ISO 15835-2:2018 Cl. 5.4 excluding Cl. 5.4.4 in conjunction with GS (2020) Vol. 2 Cl. 15.35	15.35	2413	A					
STE 6.15(b)	*Determination of tensile strength of ISO Metric Precision Hexagon Bolts and Screws (from M8 to M39 nominal size)*	*BS 18:1987 in conjunction with BS 3692:1967 Appendix D.2*		2418	A#					
STE 6.15(c)	Determination of tensile strength of ISO metric precision hexagon bolts and screws (from M8 to M39 nominal size)	ISO 6892:1998 and BS EN ISO 898-1:1999 Cl. 8.2 in conjunction with BS 3692:2001 Cl. 13		2418	A#					
STE 6.17	Static testing on steel parapet post	BS 6779:Part 1:1998 with modification		2419	√#					

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
STE 6.22	Loading test for surface boxes for gas and waterworks purposes	BS 5834-2:1983 App. A with Modifications		2405	A#					
STE 6.23	Loading test of gully tops and manhole tops for vehicular and pedestrian areas. Determination of mass for gully tops and manhole tops	Cl.8 of BS EN 124: 1994		2405	A#					
STE 6.24	Testing of mechanical connector systems for steel reinforcing bars	AC133 : 2008 Cl. 4.1.2 with modification		2413	A#					
STE 6.25	Testing of mechanical couplers	BS EN ISO 6892-1: 2009 Cl. 10.4 Method B & ISO 15835-2:2018 Cl. 5.4 excluding Cl. 5.4.4 in conjunction with COP for Structure Use of Concrete (2013) Cl. 3.2.8.3 and AC 133:2008 Cl. 4.1.2 with modifications in conjunction with COP for Structure Use of Concrete (2013) Cl. 3.2.8.4		2413	A					
STE 6.26	Charpy 'V' notch impact test on metallic materials	BS EN 10045:1990		2420						
STE 6.26(a)	Charpy 'V' notch pendulum impact test on metallic materials	BS EN ISO 148-1:2016		2420						
STE 6.27	Determination of the tensile properties of corrosion-resistant stainless steel fasteners (from M8 to M39 nominal size)	ISO 6892:1998 and ISO 898-1:1988 Cl. 8.2 in conjunction with BS EN ISO 3506-1:1998 Cl. 6.2.1 to Cl. 6.2.4		2418	√#					
STE 6.27(a)	Determination of the tensile properties of corrosion-resistant stainless steel fasteners (from M8 to M39 nominal size)	ISO 6892-1:2019 and ISO 898-1:2013 Cl. 9.2 in conjunction with BS EN ISO 3506-1:2009 Cl. 7.2.1 to Cl. 7.2.4		2418	A#					
STE 6.27(b)	Determination of the tensile properties of corrosion-resistant stainless steel fasteners (from M8 to M39 nominal size)	BS EN ISO 6892-1:2019 in conjunction with BS EN ISO 3506-1:2020 Cl. 9.1		2418	A#					
STE 6.28	*Determination of tensile strength of ISO metric black hexagon bolts and screws (from M8 to M39 nominal size)*	*BS 18:1987 in conjunction with BS 4190:1967 Appendix A.2*		2418	√#					
STE 6.28(a)	Determination of tensile strength of ISO metric black hexagon bolts and screws (from M8 to M39 nominal size)	ISO 6892:1998 and BS EN ISO 898-1:1999 Cl. 8.2 in conjunction with BS 4190:2001 Cl. 15		2418	A#					
STE 6.28(b)	Determination of tensile strength for ISO metric black hexagon bolts and screws (from M8 to M39 nominal size)	BS EN ISO 6892-1:2019 and BS EN ISO 898-1:2013 Cl. 9.2 in conjunction with BS 4190:2014 Cl. 21		2418	A#					
STE 6.29	Determination of tensile strength for fasteners made of carbon steel and alloy steel (from M8 to M39 nominal size)	ISO 6892:1998 in conjunction with BS EN ISO 898-1:1999 Cl. 8.2		2418	√#					
STE 6.30	*Proof load test for ISO metric black hexagon steel nuts*	*BS 4190: 1967 Appendix B.1*		2418	√#					
STE 6.30(a)	Proof load test for ISO metric black hexagon steel nuts	BS 4190: 2001 Annex A.1		2418	A#					
STE 6.30(b)	Proof load test for ISO metric black hexagon steel nuts (from M8 to M39 nominal size)	BS 4190:2014 Annex A.1 to A.3		2418	A#					
STE 6.31	*Proof load test for high tensile steel nuts for structural engineering metric series – general grade (from M12 to M36 nominal size)*	*BS 4395-1:1969 Cl. 3.3 & Appendix C.1 to C.3*		2418	√#					
STE 6.32	*Proof load test for corrosion-resistant stainless steel nuts (from M8 to M39 nominal size)*	*ISO 898/II in conjunction with BS 6105:1981 Cl. 6.6*		2418	√#					
STE 6.33	Proof load test for corrosion-resistant stainless steel nuts (from M8 to M39 nominal size)	BS EN ISO 898-2:1992 Cl. 8.1 and BS EN ISO 898-6:1996 Cl. 8.1 in conjunction with BS EN ISO 3506-2:1998 Cl. 6.2		2418	√#					
STE 6.33(a)	Proof load test for corrosion-resistant stainless steel nuts (from M8 to M39 nominal size)	BS EN ISO 898-2:2012 Cl. 9.1 and BS EN ISO 898-6:1996 Cl. 8.1 in onjunction with BS EN ISO 3506-2:2009 Cl. 7.2		2418	A#					

Timber

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
TIM 1.1	*Determination of moisture content*	*BS373:1957 Section 2*	*21.92*	2425	√#					
TIM 1.2	*Determination of density*	*BS373:1957 Section 5*	*21.92*	2425	√#					
TIM 2.2	*Static bending test*	*BS373:1957 Section 6*	*21.92*	2425	√#					
TIM 2.3	*Janka indentation test*	*BS373:1957 Section 9*	*21.92*	2425	√#					
TIM 2.4	*End face compression test*	*BS373:1957 Section 8a and 8b*	*21.92*	2425	√#					
TIM 2.5	*Shear test (parallel to grain)*	*BS373:1957 Section 10*	*21.92*	2425	√#					

Thermoplastic road marking materials

PWLTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
TPL 0.0	*Sampling and preparation*	*BS3262:Part 1:1989App. B*			√					
TPL 1.7	Determination of thickness of thermoplastic road marking	BS 3262:Part 3:1989 + Amd. 8785 & 10205 App. B (Micrometer method)		2426	A#					
TPL 1.8	*Determination of the softening point of thermoplastic road marking materials*	*Annex F in BS EN 1871: 2000*		2426	√#					