

**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.

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**

PW/LTM No.	Test Description	Method	GS Clause	Test Request Form Number	Availability of Testing					
					CL	NL	KL	TP	TS	SS
AGG 1.8	<i>Sieve analysis of mineral filler for bituminous paving mixtures</i>	<i>ASTM D546-05 with Modification</i>		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 (washing and sieving method/ dry sieving method)	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)	<i>Determination of particle densities and water absorption of aggregate with nominal size larger than 10 mm (wire basket method)</i>	<i>BS 812:Part 2:1995 Section 5.3</i>		2113		√		√	√	√
AGG 2.4(b)	<i>Determination of particle densities and water absorption of aggregate with nominal size not larger than 10 mm (pycnometer method)</i>	<i>BS 812:Part 2:1995 Section 5.5</i>		2113		√		√	√	√
AGG 2.5	<i>Determination of bulk density of aggregate</i>	<i>BS 812:Part 2:1995</i>		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 (pycnometer 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						√
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	<i>Determination of alkali silica reaction potential by ultra-accelerated mortar bar test</i>	<i>CSI:2010, Vol. 2:Section 22</i>		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**

PW/LTM 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 47:1985	9.49	2119						
BIT 1.3(a)	Determination of softening point of bitumen having softening point 80°C 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 asphalt 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 softening point by ring and ball method	BS EN 1427:2015/BS 2000-58:2015		2119						√
BIT 1.23	Determination of ductility of bituminous materials	ASTM D113-07		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 asphalt by vacuum capillary viscometer	ASTM D2171-10		2119						√
BIT 1.27	Determination of loss in mass after heating of industrial bitumen	BS EN 13303:2009/BS 2000-509:2009		2119						√
BIT 1.28	Determination of density of semi-solid and solid asphalt 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
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(i) to (j) of Contract Particular Specification issued by Highways Department		2112	√	√	√			√
BIT 3.21(a)	Sample preparation from extracted bitumen solution	Appendix AA 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
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 modifications		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 4.3	Determination of surface regularity by rolling straight edge	TRRL Supplementary Report 290		2115	√	√	√			√
BIT 4.5	Determination of texture depth of carriageways	GS(1992/2006) App. 10.1	10.57	2115	√	√	√			√
BIT 4.8	Determination of permeability of friction course	GS(1992/2006) 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) 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	√				√		
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	√						
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 (USR/V) 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	√						
BRK 5.4	Determination of unpolished skid resistance value (USR/V) of concrete paving blocks	BS EN 1338:2003 Annex I		2323	√						
BRK 5.5	Determination of slip resistance value (SRV) of sets 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 (USR/V) of sets of natural stone for external paving	BS EN 1342:2001 Annex C		2323	A*						
BRK 5.6	Determination of unpolished slip/skid resistance value (USR/V) 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 (USR/V) 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 footometer	BS1881:Part 1:15:1986 App. A/ CSI:1990 App. D BS EN 12390-4:2000 App.A/ CSI: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			√						





**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	Determination of point load strength for diametral and axial tests	ASTM D5731-95		2513	A					
ROC 2.9	Determination of cerchar abrasiveness index (CAI)	ASTM D7625-10 (2010)			A					
ROC 3.2	Determination of unconfined uniaxial compressive strength	ASTM D2938-95		2513	A					
ROC 3.5	Determination of elastic moduli in uniaxial compressive test	ASTM D3148-06		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 with modification		2424	√					
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	√					

**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 macier sample tube	In-house method			√					
SOL 2.18	Determination of soil moisture content by infrared oven drying	In-house method		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				√	√	

**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 45°C ± 5°C	Geospec 3 - Test Method 5.1	6.65	2510	A	A	A	A	A	A
GSP 5.2	Determination of moisture content by oven-drying at 105°C ± 5°C	Geospec 3 - 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 - 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 - Test Method 6.1	6.59	2510	A	A	A	A	A	A
GSP 6.2	Determination of liquidity index	Geospec 3 - Test Method 6.2		2510	A	A	A	A	A	A
GSP 7.1	Determination of particle density by gas jar method	Geospec 3 - Test Method 7.1			A	√	√	√	√	√
GSP 7.2	Determination of particle density by small pycnometer	Geospec 3 - Test Method 7.2			A	√	√	√	√	√
GSP 8.1	Determination of particle size distribution by wet sieving (with dispersant)	Geospec 3 - 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 - 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 - 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 - Test Method 8.6		2510	A	A	A	A	A	A
GSP 8.7	Construction of a continuous particle size distribution curve	Geospec 3 - Test Method 8.7		2510	A	A	A	A	A	A
GSP 8.8	Determination of particle size distribution of fill material	Geospec 3 - Test Method 8.18.2	6.72(3)	2510	A	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 (1000kc mould and 2.5kg rammer)	Geospec 3 - 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 (1000kc mould and 2.5kg rammer)	Geospec 3 - 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 - 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 - 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 (1000kc mould and 4.5kg rammer)	Geospec 3 - 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 (1000kc mould and 4.5kg rammer)	Geospec 3 - 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 - 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 - 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 - Test Method 11.1	6.68	2511		A <sup>2</sup>	A <sup>2</sup>	A <sup>2</sup>	A <sup>2</sup>	A <sup>2</sup>
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 - Test Method 11.2	6.68	2511		A <sup>2</sup>	A <sup>2</sup>	A <sup>2</sup>	A <sup>2</sup>	A <sup>2</sup>
GSP 11.3	Determination of in-situ bulk density of soils by nuclear densometer	Geospec 3 - Test Method 11.3	6.68	2511		√		√	√	
GSP 11.4	Determination of relative compaction of fill materials	Geospec 3 - Test Method 11.4	6.68, 9.44	2511		A	A	A	A	A
GSP 12.1	Determination of california bearing ratio (CBR)	Geospec 3 - Test Method 12.1			A					
GSP 14.1	The one-dimensional consolidation test	Geospec 3 - Test Method 14.1			A					
GSP 14.2	The isotropic compression test in a triaxial cell	Geospec 3 - Test Method 14.2			A					
GSP 15.1	The unconsolidated undrained triaxial compression test without pore pressure measurement	Geospec 3 - Test Method 15.1			A					
GSP 15.2(a)	The isotropically consolidated undrained triaxial compression test with pore pressure measurement (single-stage)	Geospec 3 - Test Method 15.2			A					
GSP 15.2(b)	The isotropically consolidated undrained triaxial compression test with pore pressure measurement (multi-stage)	Geospec 3 - Test Method 15.2			A					
GSP 15.3	The isotropically consolidated drained triaxial compression test with measurement of volume change	Geospec 3 - 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 - 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 - Test Method 16.1			A					
GSP 16.2	The direct shear test (large shear box apparatus)	Geospec 3 - Test Method 16.2			A					
GSP 16.3	Determination of friction between fill material and reinforcement elements	Geospec 3 - Test Method 16.2 with modifications based on Geoguide 6			√					



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 <sup>#</sup>						
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 <sup>#</sup>						
STE 6.24	Testing of mechanical connector systems for steel reinforcing bars	AC133 : 2008 with modification		2413	A <sup>#</sup>						
STE 6.25	Testing of mechanical couplers	In-house Method STE 6.25 in conjunction with COP for Structure Use of Concrete (2013) Cl. 3.2.8.3 and AC 133:2008 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	√ <sup>#</sup>						
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 <sup>#</sup>						
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 <sup>#</sup>						
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	√ <sup>#</sup>						
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 <sup>#</sup>						
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 <sup>#</sup>						
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	√ <sup>#</sup>						
STE 6.30	Proof load test for ISO metric black hexagon steel nuts	BS 4190: 1967 Appendix B.1		2418	√ <sup>#</sup>						
STE 6.30(a)	Proof load test for ISO metric black hexagon steel nuts	BS 4190: 2001 Annex A.1		2418	A <sup>#</sup>						
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 <sup>#</sup>						
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	√ <sup>#</sup>						
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	√ <sup>#</sup>						
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	√ <sup>#</sup>						
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 conjunction with BS EN ISO 3506-2:2009 Cl. 7.2		2418	A <sup>#</sup>						

**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	√ <sup>#</sup>						
TIM 1.2	Determination of density	BS373:1957 Section 5	21.92	2425	√ <sup>#</sup>						
TIM 2.2	Static bending test	BS373:1957 Section 6	21.92	2425	√ <sup>#</sup>						
TIM 2.3	Janka indentation test	BS373:1957 Section 9	21.92	2425	√ <sup>#</sup>						
TIM 2.4	End face compression test	BS373:1957 Section 8a and 8b	21.92	2425	√ <sup>#</sup>						
TIM 2.5	Shear test (parallel to grain)	BS373:1957 Section 10	21.92	2425	√ <sup>#</sup>						

**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	12.23		√						
TPL 1.7	Determination of thickness of thermoplastic road marking	BS 3262:Part 3:1989 App. B (Micrometer method)	12.23	2426	√ <sup>#</sup>						
TPL 1.8	Determination of the softening point of thermoplastic road marking materials	Annex F in BS EN 1871: 2000		2426	√ <sup>#</sup>						