


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

 <p>UKAS TESTING 1324</p> <p>Accredited to ISO/IEC 17025:2005</p>	<h3>Balfour Beatty Major Civil Engineering</h3> <p>Issue No: 036 Issue date: 23 December 2011</p>	
	<p>86 Station Road Redhill Surrey RH1 1PQ</p>	<p>Contact: Mr G P Booker Tel: +44 (0)1737 785000 Fax: +44 (0)1737 785100 E-Mail: Graham.Booker@bbcel.co.uk Website: www.balfourbeatty.com</p>
<p>Testing performed by the Organisation at the locations specified below</p>		

Balfour Beatty Major Civil Engineering has demonstrated its competence to establish site laboratories to conduct the testing activities covered by the scope of their accreditation to a flexible scope in accordance with their procedure GEN006UK

Current locations covered by the scope of accreditation:

Location details	Activity	Location code
<p>Skanska Balfour Beatty Site Laboratory M25 Widening Junctions 16-23 Site Office London Colney St Albans AL2 1FF</p> <p>Local contact Mr A Coates Tel: +44(0)1442 847050 Fax: +44(0)1442 266596 Email: andy.coates@sbbjv.co.uk</p>	<p>Sampling and testing of aggregates, bituminous mixtures, grout, fresh and hardened concrete, road pavement surfaces and soils for civil engineering purposes.</p>	B
<p>Balfour Beatty Civil Engineering Blackfriars Station and Bridge Works Project Site Laboratory Sampson House Hopton Street London SE1 9JB</p> <p>Local contact Mr A Thomas Tel: +44(0)20 7618 1410 Email: andrew.thomas@bbcel.co.uk</p>	<p>Sampling and testing of grout and fresh and hardened concrete.</p>	D
<p>Balfour Beatty Civil Engineering Heathrow T2b Site Laboratory Assembly Compound Next to Virgin Hanger Exeter Road Heathrow Airport TW6 2PJ</p> <p>Local Contact Mr A D'Rozario Email: alan.drozario@bbt2b.com</p>	<p>Sampling and testing of aggregates, fresh and hardened concrete and soils for civil engineering purposes.</p>	A



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<p>Balfour Beatty Civil Engineering A46 Newark to Widmerpool Improvements Site Laboratory Newton Business Park Shelford Newton Nottinghamshire NG13 8HA</p>	<p>Local contact Mr N Scott Tel: +44(0)1949 822458 Fax: +44(0)1949 822479 Email: neil.scott@bbcel.co.uk</p>	<p>Sampling and testing of aggregates, bituminous mixtures, grout, fresh and hardened concrete, road pavement surfaces and soils for civil engineering purposes</p>	<p align="center">G</p>
<p>Skanska Balfour Beatty JV Site Laboratory M25 Widening Junctions 27-30 Codham Hall Great Warley Brentwood Essex CM13 3FB</p>	<p>Local contact Mr N Chapman Tel: +44(0) 1708 256198 Fax: +44(0) 1708 256088 Email: nick.chapman@sbbjv.co.uk</p>	<p>Sampling and testing of aggregates, bituminous mixtures, grout, fresh and hardened concrete, road pavement surfaces and soils for civil engineering purposes</p>	<p align="center">H</p>

Site activities performed away from the locations listed above:

Location details	Activity	Location code
<p>All sites suitable for the activities listed</p>	<p>Sampling of aggregates, bituminous mixtures, fresh concrete and earthworks materials. On-site testing of concrete, bituminous mixtures, road pavement surfaces and soils for civil engineering purposes.</p>	<p align="center">C</p>



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DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
AGGREGATES	Resistance to wear (micro -Deval)	BS EN 1097-1:1996	G
	Resistance to fragmentation (Los Angeles Abrasion)	BS EN 1097-2:1998	B
	Particle density and water absorption	BS EN 1097-6:2000	A, B, G, H
	Particle size distribution	BS EN 933-1:1997	A, B, G, H
	Flakiness index	BS EN 933-3:1997	A, B, G, H
	Shell content	BS EN 933-7:1998	A, B
	Assessment of fines - methylene blue test	BS EN 933-9:2009	B
	Classification for the constituents of coarse recycled aggregate	BS EN 933-11:2009	B
	Water content by drying in a ventilated oven	BS EN 1097-5:1999	A, B, G, H
	Water content by drying in a ventilated oven	BS EN 1097-5:2008	B
	Loose bulk density and voids	BS EN 1097-3:1998	A, B, G, H
	Constituent materials in recycled coarse aggregate and recycled concrete aggregate	Specification for Highway Works 2006 Clause 710	B, G, H
	Sampling from conical stockpiles	BS EN 932-1:1997:Annex C	A, B, C, G, H
Sample reduction :- - using a riffle box - by quartering - to a test portion of specified mass	BS EN 932-2:1999:Clause 8, 10 & 11	A, B, C, G, H	



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BITUMINOUS MIXTURES for roads and other paved areas	Sampling from: - augers of the paver - laid but not rolled material - workable material in heaps - using a sampling shovel - compacted material by coring	BS EN 12697-27:2001	B, C, G, H
	Measurements of temperature - in a lorry - of laid materials - in a heap	BS EN 12697-13:2000	B, C, G, H
	Preparation of samples	BS EN 12697-28:2001	B, C, G, H
	Binder content by ignition	BS EN 12697-39:2004	B, G
	Particle size distribution	BS EN 12697-2:2002	B, G
	Bulk density - saturated surface dry - Procedure B	BS EN 12697-6:2003	B, G
	Laboratory compaction of bituminous mixtures by vibratory compaction	BS EN 12697-32:2003	B, G
	Percentage refusal density (PRD) by vibratory compaction	BS EN 12697-9:2002	B, G
	Maximum density - volumetric procedure	BS EN 12697-5:2002	B
	Maximum density - volumetric procedure	BS EN 12697-5:2009	G
	Air voids content	BS EN 12697-8:2003	B, G
	Air void content	Specification for Highway Works: 2004:clause 929.11	B, G
CONCRETE - fresh	Slump	BS EN 12350-2:2000	B, C, D, G, H
	Slump	BS EN 12350-2:2009	A, C
	Slump-flow test of self-compacting concrete	prEN 12350-8:2007	C



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CONCRETE - fresh (cont'd)	Degree of compactability	BS EN 12350-4:2000	B, C, G, H
	Flow	BS EN 12350-5:2000	B, C, G, H
	Flow	BS EN 12350-5:2009	A, C
	Air content - pressure gauge method	BS EN 12350-7:2000	B, C, G, H
	Sampling fresh concrete on site	BS EN 12350-1:2000	B, C, D, G, H
	Sampling fresh concrete on site	BS EN 12350-1:2009	A, C
	Making and curing specimens for strength tests	BS EN 12390-2:2000	B, C, D, G, H
	Making and curing specimens for strength tests	BS EN 12390-2:2009	A, C
	Determination of bleeding (admixtures for concrete)	BS EN 480-4:2005	B, C, G, H
	Fibre content of fibre re-inforced concrete	BS EN 14488-7:2006	B, C, G, H
GROUT	Flow	ASTM C939-02	B, C, D, G, H
CONCRETE - hardened	Compressive strength of cubes including curing	BS EN 12390-1:2000	A, B, D
		BS EN 12390-2:2000	G, H
		BS EN 12390-3:2002	H
		BS EN 12390-2:2009	A, B
		BS EN 12390-3:2009	A, B
	Flexural strength	BS EN 12390-5:2009	A
Cored specimens - taking, examining and testing in compression	BS EN 12504-1:2000	B, C, H	
Concrete rebound number	BS EN 12504-2:2001	C	
Density	BS EN 12390-7:2000	A, B, D, G, H	



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CONCRETE - hardened (cont'd)	Depth of penetration of water under pressure	BS EN 12390-8:2000 BS EN 12390-8:2009	B
MORTAR for masonry	Bulk sampling of mortars and preparation of test mortars	BS EN 1014-2:1999	D
	Consistence of fresh mortar (by plunger penetration)	BS EN 1015-4:1999	D
	Compressive strength of hardened mortar	BS EN 1015-11:1999	D
ROAD PAVEMENT SURFACES	Surface regularity using a rolling straight-edge	Specification for Highway Works, TSO May 2008, Clause 702 and UKAS Publication TPS 25	B, C, G, H
	Texture depth by the sand patch method	BS 598:Part 105:2000	B, C, G, H
SOILS and STABILISED SOILS for civil engineering purposes, UNBOUND and HYDRAULICALLY BOUND MIXTURES	California Bearing Ratio (CBR)	BS 1377:Part 4:1990	B, G, H
	Hand shear vane	Guideline for handheld shear vane test: New Zealand Geotechnical Society Inc August 2001	B, C, G, H
	Moisture content - oven drying method	BS 1377:Part 2:1990	A, B, G, H
	Moisture content - oven drying method	BS 1924:Part 2:1990	G
	Saturation moisture content of chalk	BS 1377:Part 2:1990	B
	Liquid limit - cone penetrometer - cone penetrometer (one point)	BS 1377:Part 2:1990	A, B, G, H
	Plastic limit	BS 1377:Part 2:1990	A, B, G, H
	Plasticity index and liquidity index	BS 1377:Part 2:1990	A, B, G, H
	Particle size distribution - wet sieving	BS 1377:Part 2:1990	A, B, G, H



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SOILS and STABILISED SOILS for civil engineering purposes, UNBOUND and HYDRAULICALLY BOUND MIXTURES (cont'd)	Particle size distribution - dry sieving	BS 1377:Part 2:1990	A, B, G, H
	Uniformity coefficient	Specification for Highway Works: Series 600:Table 6-1:Footnote 5	B, G, H
		BS 6100:Part 2.2.1: 1992	A
	Particle density - gas jar method	BS 1377:Part 2:1990	A, B, G, H
	Dry density/moisture content relationship (2.5 kg rammer)	BS 1377:Part 4:1990	A, B, G, H
	Dry density/moisture content relationship (4.5 kg rammer)	BS 1377:Part 4:1990	A, B, G, H
	Dry density/moisture content relationship (vibrating hammer)	BS 1377:Part 4:1990	A, B, G, H
	Laboratory reference density and water content - vibrating hammer method	BS EN 13286-4:2003	G
	Moisture condition value	BS 1377:Part 4:1990	A, B, C, G, H
	Manufacture of test specimens using vibrating hammer compaction	BS EN 13286-51:2004	G
	Compressive strength of cubic specimens	BS EN 13286-41:2003	G
	Apparent in-situ resistivity	BS 1377:Part 9:1990	C
	In-situ density - sand replacement method (large & small pouring cylinder)	BS 1377:Part 9:1990	B, C
In-situ density - core cutter method	BS 1377:Part 9:1990	A, B, C, G, H	



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SOILS and STABILISED SOILS for civil engineering purposes, UNBOUND and HYDRAULICALLY BOUND MIXTURES (cont'd)	In-situ density - nuclear compliance testing	BS 1377:Part 9:1990	A, B, C, G, H
	In-situ density - nuclear gauge method	BS 1924:Part 2:1990	C, G
	Sampling earthworks materials	Documented In-house Method Test 001	A, B, C, G, H
END			