Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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UKAS TESTING **4438** **Accredited to ISO/IEC 17025:2017**	**BICS Laboratories Ltd** **Issue No:** 035 **Issue date:** 08 September 2026	
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Testing performed at the above address only		

DETAIL OF ACCREDITATION

BICS laboratories Ltd, is accredited for a flexible scope that enables it to:

1) Update currently accredited test methods to the latest versions of those test methods using the procedures documented in Procedure CP16
2) Include methods technically equivalent to those currently accredited within the scope of accreditation using the procedures documented in Procedure CP16
3) To include tests on the same or similar product types against new standards that are not specifically listed in this Schedule using procedures documented with CP16 Rev 14 and CP16G - Approved Similar Standards List Flexible scope.

The limits of the flexible scope are given below:

Flexible Scope

BICS is accredited to ISO/IEC17025:2017 for testing activities in accordance with the test methods highlighted in the schedule. This may also include tests on the same or similar product types against standards, or customer-specified methods, that are not specifically listed in this Schedule, providing that:

(1) The method or standard does not introduce new principles of measurement.

(2) The method or standard does not require measurements to be made outside the parametric boundaries defined within the standard specifications already accredited and detailed within this Schedule of Accreditation.

Information about flexible scopes of accreditation is available in UKAS document Gen 4 and EA document EA-2/05.

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Dimensional, Physical and Mechanical Tests	
GEOGRIDS	Mass per unit area	ASTM D5261-10(2024) ASTM D3776/D3776M-20(2025) BS EN ISO 9864:2005
	Thickness	ASTM D5199-2025 BS EN ISO 9863-1:2016+A1:2019 ASTM D5994/D5994M-10(2021)
	Tensile strength	ASTM D6637/D6637M-15(2023)
	Tensile strength - wide width strip	ASTM D4595/D4595M-24 BS EN ISO 10319:2024
	Geonet Breaking Force	ASTM D7179-18(2025)
	Dimensional, Physical, Mechanical and Thermal Tests	
GEOMEMBRANES	Thickness	ASTM D5199-2025 BS EN ISO 9863-1:2016+A1:2019 ASTM D5994/D5994M-10(2021)
	Asperity height	ASTM D7466/D7466M-23 Geosynthetic Research Institute test method GM 12
	Carbon black content	ASTM D4218-20 ASTM D1603-20
	Carbon black dispersion in polyolefin geosynthetics	ASTM D5596-03(2021)
	Density of plastics	ASTM D1505- 25
	Dimensional Stability	BS EN 1107-2:2001
	Standard Test Method of Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature	ASTM D1204-25
	Melt - Flow Index	ASTM D1238-23a BS EN ISO 1133-1:2022

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Dimensional, Physical, Mechanical and Thermal Tests (cont'd)	
GEOMEMBRANES (cont'd)	Oxidative Induction Time of polyolefins by Differential Scanning Calorimetry	ASTM D3895-19 ASTM D8117-21 BS EN ISO 11357-6(2025)
	Index Puncture Resistance of Geomembranes and Related Products	ASTM D4833/D4833M-07(2026)
	Determination of the pyramid puncture resistance of supported geosynthetics	BS EN 14574:2015
	Static puncture test (CBR)	BS EN ISO 12236:2006
	Stress cracking using notched constant tensile load	ASTM D5397-20 BS EN 14576:2005
	Seam strength (Shear & peel)	ASTM D6392-25
	Standard Test Method for Plastic Welding Personnel – Qualification Testing of Welders' Thermoplastic Assemblies	BS EN 13067: 2020 ASTM D6392-25
	Tear resistance	ASTM D1004-21 BS ISO 34-1:2022 Method B
	Tensile & Elongation	ASTM D6693/D6693M-20(2024) BS EN ISO 527-3:2018 ASTM D7275-07(2018)
	Tensile properties of plastics	ASTM D638-22
	Calculation of 2% secant modulus for polyethylene geomembranes	ASTM D5323-19a(2023)
	Testing of welded joints of thermoplastics semi-finished products. Peel test, clause 5	BS EN 12814-4:2018

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	<u>Dimensional, Physical and Mechanical Tests</u>	
GEOSYNTHETIC CLAY LINERS	Mass per unit area	ASTM D5993-18(2022) ASTM D5261-10(2024) ASTM D3776/D3776M-20(2025) BS EN 14196:2016 BS EN ISO 9864:2005
	Thickness	ASTM D5199-2025 BS EN ISO 9863-1:2016+A1:2019
	Bentonite free swell	ASTM D5890-25
	Moisture content of bentonite	ASTM D4643-17 DIN 18121-2:2020-11 clause 6.3
	Water (Moisture) content	ASTM D2216-19 ISO 11465: (2025)
	Water Absorption	ASTM E946-92
	Water Absorption Capacity	DIN 18132:2012-04 BS EN ISO 10769:2011
	Hydraulic conductivity	ASTM D5084-24
	Index Flux	ASTM D5887/D5887M-23
	Water flux index – flexible wall permeameter method at constant head	BS EN ISO 16416:2023
	Standard Test Method for Evaluation of Hydraulic Properties of Geosynthetic Clay Liners Permeated with Potentially Incompatible Aqueous Solutions	ASTM D6766–20a
	Static puncture (CBR)	ASTM D6241-22a BS EN ISO 12236:2006
	Grab Breaking Load and Elongation	ASTM D4632/D4632M-15a(2023)
	Peel strength	ASTM D6496/D6496M-23a

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Dimensional, Physical and Mechanical Tests (cont'd)	
GEOSYNTHETIC CLAY LINERS (cont'd)	Tensile strength of GCL	ASTM D6768/D6768M-20(2026)
	Tensile strength - wide width strip	ASTM D4595/D4595-24 BS EN ISO 10319:2024
	Determination of the internal and interface shear strength of geosynthetic clay liners by the direct shear method	ASTM D6243/D6243M-26
GEOSYNTHETIC CEMENTITIOUS MATERIALS	Flexural strength of a Geosynthetic Cementitious Composite Mat (GCCM) using the Three Point Bending Test	ASTM D8058-24
BENTONITE CLAY	Bentonite free swell	ASTM D5890-25
	Fluid Loss	ASTM D5891/D5891M-25
	Moisture content of bentonite	ASTM D4643-17 DIN 18121-2:2020-11 clause 6.3
	Montmorillonite Content (Methylene Blue)	API recommended Practice 13I CUR 33 VDG P69 (LFE3)
	Water (Moisture) content	ASTM D2216-19 AS 1289.2.1.1-2005(2016) ISO 11465:2025
	Water Absorption Capacity	DIN 18132:2012-04 ISO 10769:2011
	Water flux index – flexible wall permeameter method at constant head	BS EN ISO 16416:2023
GEOTEXTILES and related products	Mass per unit area	ASTM D5261-10(2024) BS EN ISO 9864:2005 ASTM D3776/D37776M-20(2025) AS 2001.2.13-1987(2016) AS 3706.1:2012(2023)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Dimensional, Physical and Mechanical Tests (cont'd)	
GEOTEXTILES and related products (cont'd)	Thickness	ASTM D5199-2025 BS EN ISO 9863-1:2016+A1:2019 AS 2001.2.15-1989(2016)
	Apparent opening size	BS EN 12956:2020 ASTM D4751-21a AS 3706.7-2014 AS 3706.7-2003
	Hydraulic Transmissivity	ASTM D4716/D4716M-22
	In-plane water flow	BS EN ISO 12958-1:2020
	Water flow – Constant head method	BS EN ISO 11058:2019 Clause 5
	Water Permeability by Permittivity	ASTM D4491/D4491M-22 AS 3706.9-2023
	Determination of the pyramid puncture resistance of supported geosynthetics	BS EN 14574:2015
	Resistance to perforation (Cone drop)	BS EN 13433:2025 AS 3706.5:2014
	Static puncture (CBR)	ASTM D6241-22a BS EN ISO 12236:2006 ASTM D4833/D4833M-07(2026) AS 3706.4-2012(2023)
	Grab Breaking Load and Elongation	ASTM D4632/D4632M-15a(2023) AS 2001.2.3.2:2001(2016)
	Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)	ASTM D5035-11(2024)
	Strength of internal structural junctions (Shear & peel)	BS EN ISO 13426-2:2024
	Tensile strength - wide width strip	ASTM D4595/D4595M-24 BS EN ISO 10319:2024 AS 3706.2-2012(2023)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Dimensional, Physical and Mechanical Tests (cont'd)	
GEOTEXTILES and related products (cont'd)	Trapezoid tearing strength	ASTM D4533/D4533M-15(2023) ASTM D4073/D4073M-06(2024) AS 3706.3-2012(2023)
	Determination of the long term protection efficiency of geotextiles in contact with geosynthetic barriers	BS EN 13719:2016
	Cylinder testing of protectors for geomembranes	Environment Agency methodology for Cylinder Testing of geomembranes and their protective materials - LFE2 2014
	Determination of resistance to weathering	BS EN 12224:2000
	Geosynthetics – Screening test method for determining the resistance of geotextiles and geotextile related products to oxidation	EN ISO 13438:2018
	Effect of exposure of Unreinforced polyolefin Geomembranes using flouorescent uv condensation apparatus	ASTM D7238-20
	Standard test method for compressive properties of rigid cellular plastics	ASTM D1621-16(2023)
	Standard test method for short term compression behaviour of geosynthetics	ASTM D6364-06(2025)
	Standard test method for determining the bond strength (ply adhesion) of composite	ASTM D7005-16(2024)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Dimensional, Physical and Mechanical Tests (cont'd)	
GEOSYNTHETIC – SOIL INTERFACE TESTS (The term geosynthetics includes geotextiles, geomembranes, geocomposites, geogrids, geonets and geosynthetic clay liners)	Determination of shear strength of soil-geosynthetic and geosynthetic-geosynthetic interfaces by direct shear.	ASTM D5321/D5321M-21
	Determination of friction characteristics	BS EN ISO 12957-1:2018
	Geosynthetics Inter-face Shear Resistance Testing	Landfill Guidance Group - Industry Code of Practice, LGG 115, February 2018
FLEXIBLE SHEETS FOR WATERPROOFING	Determination of thickness and mass per unit area	BS EN 1849-2:2019
	Density	BS EN 1183-2:2019
	UV ageing/irradiation	BS EN 1297:2004 BS EN ISO 4892-3:2024
	Bitumen, plastic and rubber sheets for roof waterproofing – determination of water tightness	BS EN 1928: 2000 Method A
	Flexible sheets for waterproofing. Bitumen, plastic and rubber sheets for roof waterproofing - determination of resistance to static loading	BS EN 12730:2015 – Method B
END		