Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

UKAS TESTING **2594** **Accredited to ISO/IEC 17025:2017**	**R-TECH Services Ltd trading as R-TECH Group** **Issue No:** 043 **Issue date:** 17 September 2026	
	Testing House **Kenfig Industrial Estate** **Margam** **Port Talbot** **SA13 2PE**	**Contact: Geraint Havard** **Tel: +44 (0)1656 748000** **E-Mail: G.Havard@r-techgroup.co.uk** **Website: www.r-techgroup.co.uk**
Testing performed at the above address only		

R-Tech Group is accredited for a limited flexible scope that enables the laboratory to conduct accredited testing through the modification of existing test methods, inclusion of technically equivalent standard methods and inclusion of revised standard methods to activities detailed below, in accordance with their documented in-house procedure RT 08 Version 1.5, 29/01/2026.

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS	Chemical Tests Elemental Analysis	Chemical tests for elemental analysis by **ICP-OES** are covered for flexible scope for the modification of existing test methods
High Alloy Steel and Stainless Steel	Al, As, B, Co, Cr, Cu, Mn, Mo, Nb, Ni, P, Pb, Sb, Si, Sn, Ti, V, W, Zr	Documented In-House method APM10 using ICP-OES
Plain carbon and low alloy steels*	Fe, Si, Mn, P, Cr, Mo, Ni, Al, B, Co, Cu, Nb, Sn, Ti, V	Documented In-House method APM10 using ICP-OES
Plain carbon, low alloy and stainless steels	Carbon and Sulphur	Documented In-House method APM 04 using Leco CS 744 analyser
Plain carbon, low alloy and stainless steels	Oxygen and Nitrogen	Documented In-House method APM 05 using Leco ON 736 analyser
WELDMENTS	Mechanical Tests	Weldments are covered for flexible scope for the modification of existing test methods
	Tests designated in specified welding codes, as detailed below: Hardness, Tensile and Visual Examination	BS EN ISO 15614-1:2017 +A1:2019 BS EN ISO 9015-1:2011 BS EN ISO 4136:2022 BS EN ISO 17637:2016

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Mechanical Tests	Mechanical tests are covered for flexible scope for the modification of existing test methods
Plain carbon, low alloy and stainless steels	Tensile (Forces up to 1500 kN)	BS EN ISO 6892-1:2019 (Method B) excluding annex G ASTM A370-24a
	Vickers hardness (HV0.5, HV1, HV10 & HV30)	BS EN ISO 6507-1:2023
Carbon steel, stainless steel & stainless steel clad reinforcing bars, wire rod, wires, welded fabrics for the reinforcement of concrete, and steel bars, and wire for the pre-stressing of concrete	Bend	BS 6744:2023 BS EN 10080:2005 ASTM A615/A615M-25 ASTM A706/A706M-25
	Re-bend	BS 4482:1985 (Withdrawn) BS 4482:2005 BS 4449:1997 (Superseded) BS 4449:2005 + A3:2016 BS EN ISO 15630-1 :2019 BS EN ISO 15630-2:2019 BS EN ISO 15630-3:2025
	Reverse bend	ISO 7801:2024
	Tensile (Forces up to 1500 kN)	BS 4449:1997 (Superseded) BS 4449:2005 +A3:2016 BS 4482:1985 (Withdrawn) BS 4482:2005 BS 4483:1998 (Withdrawn) BS 4483:2025 BS 4486:1980 BS 6744:2023 BS EN ISO 6892-1:2019 (Method B) exc. Annex G BS EN ISO 15630-1:2019 BS EN ISO 15630-2:2019 BS EN ISO 15630-3:2025 ASTM A615/A615M-25 ASTM A706/A706M-25 ASTM A970/A970M-25

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Mechanical Tests (cont'd)	
Carbon steel, stainless steel & stainless steel clad reinforcing bars, wire rod, wires, welded fabrics for the reinforcement of concrete, and steel bars, and wire for the pre-stressing of concrete (cont'd)	Fatigue (Forces up to 400 kN)	BS 4449:1997 (Superseded) BS 4449:2005 + A3:2016 BS EN ISO 15630-2:2002 (withdrawn) BS EN ISO 15630-1:2019 BS EN ISO 15630-2:2019 BS EN ISO 15630-3:2025
	Weld shear	BS 4483:1998 (withdrawn) BS 4483:2025 BS EN ISO 15630-2:2019
	Dimensional Tests	
	Determination of geometrical characteristics Indentation measurements Relative rib area Deviation from nominal mass per metre	BS EN ISO 15630-1:2019 BS EN ISO 15630-2:2019 BS EN ISO 15630-3:2025
	Determination of geometrical characteristics Relative rib area	BS 6744:2023
	Effective cross-sectional area Projected and relative rib area	BS 4449:1997 (Superseded) BS 4449:2005 + A3:2016
	Measurement of Deformations	ASTM A615/A615M-25 ASTM A706/A706M-25
	Metallurgical Tests	
	Macro examination	Documented In-House Method PM23
	Mechanical Tests	
Welded carbon & stainless steel reinforcing bars	Bend	BS EN ISO 17660-1

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Mechanical Tests (cont'd)	
Welded carbon & stainless steel reinforcing bars (cont'd)	Tensile (Forces up to 1500 kN)	BS 4449:1997 (Superseded) BS 4449:2005 + A3:2016 BS 6744:2023 BS 7123:1989 (Superseded) BS EN ISO 17660-1:2006
	Hardness survey (HV30, HV10 & HV1.0)	BS EN ISO 9015-1:2011 BS EN ISO 15614-1:2017 + A1:2019
	Weld shear (Forces up to 900 kN)	BS EN ISO 15630-2:2019 BS EN ISO 17660-1:2006
	Metallurgical	
	Macro examination	BS 7123:1989 (Superseded) BS EN ISO 17660-1:2006 BS EN ISO 17660-2:2006 DIHM PM25
	Mechanical Tests	
Mechanical splices, (couplers) for reinforcement of concrete	Tensile (Forces up to 1500 kN)	BS 4449:1997 (Superseded) BS 4449:2005 + A3:2016 BS EN ISO 15630-1:2019 BS 8597:2015 Sellafield Engineering Standard ES_0_3110_2 ASTM A1034-24 NF A35-20-2-1:2017
	Compression (Forces up to 1500 kN)	DIHM PM51 Sellafield Engineering Standard ES_0_3110_2 ASTM A1034-24
	Cyclic tensile (Forces up to 1500 kN)	DIHM PM50 & PM 58 Sellafield Engineering standard ES0_3110_2 ASTM A1034-24

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Mechanical Tests (cont'd)	
Mechanical splices, (couplers) for reinforcement of concrete (cont'd)	Low cycle reverse loading tests, S1, S2 and S	ISO 15835-2:2009 (superseded) ISO 15835-2:2018
	Fatigue (Forces up to 400 kN)	BS 8597:2015 BS EN ISO 15630-1:2019 ASTM A1034-24 NF A35-20-2-1:2017
	Slip test	BS 8597 ISO 15835-2:2009 (superseded) ISO 15835-2:2018 ASTM A1034-24
	Tensile (Temperature ≤ -7 °C) (Forces up to 1200 kN)	DIHM PM49 Sellafield Engineering standard ES_0_3110_2
	Determination of permanent offset (elongation / slip)	BS 8110-1:1997 (Withdrawn) DIHM PM18 & PM45 Sellafield Engineering Standard ES_0_3110_2 ASTM A1034-24 NF A35-20-2-1:2017
Headed anchors for reinforcing steel	Tensile (Forces up to 1500 KN)	DIHM PM61 & PM62 Sellafield Engineering Standard ES_0_3110_2
	Load Transfer in air (tensile test)	ISO 15698-2:2012
	Robustness Test (wedge tensile test)	ISO 15698-2:2012
	Permanent elongation / slip in tension or compression (Forces up to 1500 kN)	DIHM PM61 & PM62 Sellafield Engineering Standard ES_0_3110_2
	Tensile (Temperature ≤ -7 °C) (Forces up to 1500 kN)	DIHM PM62 Sellafield Engineering Standard ES_0_3110_2

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
METALS, ALLOYS and METAL PRODUCTS (cont'd)	Mechanical Tests (cont'd)	
Headed anchors for reinforcing steel (cont'd)	Cyclic Tensile (Forces up to 1500 kN)	DIHM PM63 Sellafield Engineering Standard ES_0_3110_2
Bar, wire and strand for the pre-stressing of concrete	Modulus of elasticity (Forces up to 1000 kN)	BS EN ISO 15630-3:2025
PLASTICS, INCLUDING REINFORCED PLASTICS, FIBRE REINFORCED PLASTIC COMPOSITES, LAMINATES and RESINS	Physical Tests	Plastics tests are covered for flexible scope for the modification of existing test methods
	Glass Content	BS EN ISO 1172:2023 Method A
	Resin, Fibre and Void Content	BS ISO 14127:2024 Procedure A3
	Density and Specific Gravity (Relative Density)	ASTM D792-20
	Water absorption	BS EN ISO 62:2008
	Thermal Properties Analysis	
	Glass transition temperature by dynamic mechanical analysis (DMA)	BS ISO 6721-11:2019 ASTM D7028-07(2024)
	Coefficient of thermal expansion by thermomechanical analysis (TMA)	BS ISO 11359-1:2023 BS ISO 11359-2:2021 ASTM E831-24
	Glass transition temperature by Differential Scanning Calorimeter (DSC)	BS EN ISO 11357-2:2020

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
PLASTICS, INCLUDING REINFORCED PLASTICS, FIBRE REINFORCED PLASTIC COMPOSITES, LAMINATES and RESINS (cont'd)	<u>Mechanical Tests</u> (Performed in an environment of controlled temperature and relative humidity)	
	Tensile properties (Forces up to 250 kN)	BS EN ISO 527-2:2012 BS EN ISO 527-4:2023 BS EN ISO 527-5:2021 ASTM D3039/D3039M-17 ASTM D5766-23
	Shear properties - In-plane Shear (±45° Tension) - V-Notched Rail Shear Method - V-Notched Beam Method	 BS EN 6031:2015 ASTM D7078/D7078M-20^{e}1 ASTM D5379/D5379M-19
	Apparent Interlaminar Shear strength (Forces up to 250 kN)	BS EN 2563 :1997
	Apparent interlaminar shear strength (Short Beam) (Forces up to 10 KN)	BS EN ISO 14130:1998 ASTM D2344/D2344M-22
	Barcol hardness	BS 2782-10: Method1001:1977 (Withdrawn)
	Compressive properties (Forces up to 250 KN)	BS EN ISO 604:2003 ASTM D6641/D6641M-23
	Compressive modulus and strength	BS EN 2850:2017
	Determination of heat deflection temperature	BS EN ISO 75-1:2020 BS EN ISO 75-2:2013
	Flexural properties (Forces up to 10 kN & 100 kN)	BS EN ISO 178 :2019 BS EN ISO 14125 :1998 + A1:2011 ASTM D790-17
	In-plane shear strength at 5%/shear strain/shear modulus by tensile test of a ±45° laminate (Forces up to 250 kN)	BS EN ISO 14129:1998 ASTM D3518/D3518M-18
Fibre Reinforced Plastic Rebar	Tensile properties (forces up to 1500 kN)	ASTM D7205-21 ISO 10406-1:2015

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
ADHESIVES	Mechanical Tests (Performed in an environment of controlled temperature and relative humidity) (cont'd)	Adhesives tests are covered for flexible scope for the modification of existing test methods
	Lap shear strength of rigid-to-rigid bonded assemblies (Forces up to 250 kN)	ISO 4587:2003
	Climbing drum peel (Forces up to 10 kN)	ASTM D1781-98(2021)
	Core shear properties of sandwich constructions by beam flexure (Forces up to 250 kN)	ASTM C393/C393M-20
Sandwich Construction (Core)	Flatwise Tensile	ASTM C297/C297M-16(2024)
PLUMBING ITEMS. ITEMS IN CONTACT WITH THE WATER DISTRIBUTION NETWORK	Mechanical, Physical tests and examination of water fittings which are subject to the UK regulations scheme	Methods documented in the Water Regulations Advisory Scheme. Tests are covered for flexible scope for the modification of existing test methods Test Code Sheets
Taps, valves, float operated valves, plug cocks, ferrules, water heaters,	Closure (up to 60 bar) - under high downstream pressure - under low downstream pressure	1111.1 1111.8 1111.11
water meters and plumbing fittings for use with tube/pipe.	Porosity	1112.1
	Joint Effectiveness	1113.1
Draw-off taps, compression type fittings for tube/pipe	Torque – Operating Mechanism	1315.1
	Torque – Connection & Disconnection	1315.2
	Torque – Backnuts	1315.4

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
PLUMBING ITEMS. ITEMS IN CONTACT WITH THE WATER DISTRIBUTION NETWORK (cont'd)	<u>Mechanical, Physical tests and examination of water fittings which are subject to the UK regulations scheme</u> (cont'd)	Methods documented in the Water Regulations Advisory Scheme. Tests are covered for flexible scope for the modification of existing test methods Test Code Sheets
Compression type fittings for tube/pipe	Tension - Single pull (Pull out of assembled joint)	1314.1 1314.7 1314.9 1314.10 1314.11 1314.12 1314.13 1314.14 1314.15
All water fittings	Tension – Multiple pull (Pull out of assembled joint)	1314.8
	Corrosion Protection	1412.1
	Means for Connection & Disconnection	1611.5
	Visual Inspection Seal to be readily renewable	1611.8
	Visual Inspection Fixing of washer plate	1611.9
	Visual Inspection Means of Operation	1611.10
	Visual Inspection All fittings	4001.11
	Effect upon water quality (non-metallic materials)	2111.1
	Marking for identification	6001.1
	Tap Gap	2213.18 2213.19

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
PLUMBING ITEMS. ITEMS IN CONTACT WITH THE WATER DISTRIBUTION NETWORK (cont'd)	Mechanical, Physical tests and examination of water fittings which are subject to the UK regulations scheme (cont'd)	Methods documented in the Water Regulations Advisory Scheme. Tests are covered for flexible scope for the modification of existing test methods Test Code Sheets
All water fittings (cont'd)	Linear Dimensions	5011.1
Soldered fittings in contact with potable water	Determination of the presence of Lead in solder	2111.3
Plastic pipes and fittings	Determination of Opacity	2114.2 BS EN ISO 7686:2005
TAPS	Endurance	1211.3 2211.3 BS EN 200:2023 (Clause 12.3) BS EN 817:2008 (Clause 12.3)
FLEXIBLE SCOPE CONSTRAINTS ENGINEERING and STRUCTURAL COMPONENTS, PRODUCTS, FIXINGS, WELDMENTS AND RIGID PLASTICS, FIBRE REINFORCED POLYMERIC MATERIALS, PLUMBING ITEMS, ITEMS IN CONTACT WITH THE WATER DISTRIBUTION NETWORK , METALS, ALLOYS & METAL PRODUCTS	Tensile & compressive forces, Fatigue, Displacement, Bending, Hardness, Metallurgy, Physical properties (Polymers and composites), Dimensional measurement, Chemical tests, • Forces up to ± 1500 kN • Forces up to ± 250 kN (Polymers & Composites) • Fatigue ± 400 kN • Dimensional (within calibrated limits of the optical projector and measuring instruments) • Hardness (Vickers & Barcol) • Pressure (Hydrostatic) up to 60 Bar • Elemental analysis by ICP-OES	Documented In-House Methods developed using procedure RT 08 Version 1.5, 29/01/2026
END		