



Wyndham Way, Telford Way, Kettering, Northants NN16 8SD
United Kingdom
Tel: +44 (0)1536 410000 Fax: +44 (0)1536 410626 E-mail: info@satra.co.uk

SATRA TEST METHODS

January 2010

INTRODUCTION

SATRA has developed over 250 test methods for footwear and consumer products. This catalogue lists the SATRA test methods in three ways:

1. In order of reference number, allowing users to check sets for completeness.
2. By material type, component or product, enabling test methods applicable to a particular item to be readily identified.
3. By type of test, so that alternative test methods for a particular property are listed together.

For further information and prices please contact Gill Tillin at SATRA Global Test Methods
E-mail: testmethods@satra.co.uk

This publication is the property of SATRA Technology Centre: it may not be copied electronically or otherwise, or republished in part or in whole by any other party.

SATRA TEST METHODS – JANUARY 2010

SATRA TM1	Nov 04	Thickness of leather and insole materials
SATRA TM2	May 95	Tensile properties of insole materials
SATRA TM3	Mar 99	Flexing index
SATRA TM4	Mar 93	Change in flexing index due to exposure to heat
SATRA TM5	May 00	Stitch-tear strength
SATRA TM6	Mar 93	Water absorption and desorption - total immersion method
SATRA TM8	Jun 04	Colour fastness to circular rubbing
SATRA TM9	Nov 92	Surface water absorption and repellency
SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM11	Jan 93	Pin holding strength of insole materials
SATRA TM12	Mar 93	Density of leather and insole materials
SATRA TM14	Nov 04	Resistance to scuffing by mild circular abrasion
SATRA TM17	Apr 97	Shrinkage temperature of leather
SATRA TM18	Aug 95	Shape retention - dome plastimeter method
SATRA TM19	Aug 01	Dimensional measurements of plastic heels
SATRA TM20	Aug 00	Lateral impact test for shoe heels
SATRA TM21	Jul 01	Fatigue test for shoe heels
SATRA TM23	Nov 04	The SATRA/PATRA water vapour permeability test for shoe upper materials
SATRA TM24	Apr 92	Lastometer ball burst test
SATRA TM25	May 92	Vamp flex test - resistance to creasing and cracking
SATRA TM27	Nov 04	Thickness of non-leather flexible sheet materials
SATRA TM28	Jul 94	Mass per unit area
SATRA TM29	Nov 92	Breaking strength and extension at break
SATRA TM30	Sep 95	Tear strength - trouser leg method
SATRA TM31(2005)	Apr 03	Abrasion resistance - Martindale method
SATRA TM33	Nov 92	Strength perpendicular to needle perforations
SATRA TM34(2009)	Mar 93	Resistance to water penetration - Maeser test
SATRA TM35	Jul 94	Static friction
SATRA TM36	May 99	Break/pipiness
SATRA TM37	May 99	Nail penetration - shoe bottoms and protective midsoles
SATRA TM38	May 99	Impact scuff test for upper leather
SATRA TM40	Mar 99	Moulded-on rubber soles - state of cure test
SATRA TM41	May 99	Dynamic water penetration test for sole leather
SATRA TM43	Jun 00	Tensile strength and extension at break of leather
SATRA TM44	May 94	Liability to wrinkle
SATRA TM45	Mar 98	Stitchability of upper threads
SATRA TM47	Jun 02	Water vapour permeability and absorption
SATRA TM48	Aug 96	Determination of grain crack index for sole leathers
SATRA TM49	Apr 95	Resistance to damage due to contact with a hot surface
SATRA TM50	Dec 92	Resistance of slide fasteners to repeated opening and closing
SATRA TM51	Aug 93	Lateral strength of slide fasteners
SATRA TM52	Jan 02	Strength of slide fastener pullers
SATRA TM53	Sep 92	Attachment strength of slide fastener end stops
SATRA TM55	Mar 99	Flexing resistance of upper materials – Bally flexometer
SATRA TM58	May 99	Stiffness of steel shanks
SATRA TM59	Sep 00	Longitudinal stiffness of insole backparts
SATRA TM60	Jul 92	Ross flex test - resistance to cut growth on flexing
SATRA TM63	Sep 09	Oil swelling test for sole materials
SATRA TM64	Jan 96	Compression set - constant stress method
SATRA TM65	May 92	Split tear strength
SATRA TM68	Nov 92	Density of cellular materials
SATRA TM70	Jul 01	Heat shrinkage of cellular solings
SATRA TM72	May 94	Linear density
SATRA TM73	Jul 00	Twists per unit length of threads
SATRA TM74	Jun 94	Breaking force, extension at break, strength factor and tightness of threads
SATRA TM76	Jul 01	Water absorption of cellular solings by the vacuum method

SATRA TM77	Apr 92	Flexing machine - water penetration test
SATRA TM80	Apr 92	Transverse tensile strength of sheet materials
SATRA TM81	Apr 92	Trough - water penetration test
SATRA TM83	Sep 09	Measurement of the area shape retention and collapsing load of formed toe puff and stiffener materials
SATRA TM84	Mar 97	Abrasion resistance - reciprocating method
SATRA TM85	Jul 94	Resistance of slide fasteners to damage during closure under a lateral force
SATRA TM86	Jul 01	Impact test for rigid units and shoe bottoms
SATRA TM87	Jan 98	Fatigue test for rigid sole units and shoe bottoms
SATRA TM88	Aug 01	Measurement of the torsional stiffness of insole backparts
SATRA TM92	May 92	Resistance of footwear to flexing
SATRA TM93	Feb 93	Abrasion between shoe laces and eyelets
SATRA TM94	Jun 93	Breaking force and extension at break of shoe laces
SATRA TM95	Jul 96	Abrasion and snagging resistance - drum method
SATRA TM96	Sep 95	Security of heel pins
SATRA TM97	Feb 99	Fatigue test for steel shanks
SATRA TM98	Jun 92	Dimensional stability with changes in atmospheric humidity
SATRA TM101	May 93	Surface peel strength of insole materials
SATRA TM102	Jun 99	Measurement of the limit of useful extension of elastics
SATRA TM103	Aug 92	Resistance of elastics to repeated extension
SATRA TM104	Dec 96	Fatigue resistance of whole shoe backparts
SATRA TM105	Feb 95	Resistance to surface peeling due to scraping when hot
SATRA TM106	Dec 94	Breaking force, extension at break and tightness of tapes and bindings
SATRA TM108	Sep 92	Strength of top-piece attachment
SATRA TM111	Jul 00	Tendency to wrinkle of polyurethane coated fabrics
SATRA TM112	Apr 95	Fatigue resistance of insole backparts and backpart components
SATRA TM113	Dec 96	Measurement of the strength of attachment of heels to footwear and the backpart rigidity of footwear
SATRA TM115	Aug 00	Torsional strength of top piece attachment
SATRA TM116	Aug 00	Hot stress cracking of patent leather finishes - Zwik method
SATRA TM117	Dec 92	Attachment strength of decorative bows
SATRA TM118	Aug 92	Strength of sandal toe posts
SATRA TM120	Jul 01	Strength of attachment of straps and nailed or stapled uppers
SATRA TM121	Mar 98	Shrinkage of insole materials on repeated wetting and drying
SATRA TM123	Jul 92	Closure strength of touch and close fasteners
SATRA TM125	Sep 92	Hardness - Rockwell 'C' method
SATRA TM126	Jul 00	Fatigue resistance of buckled fastenings
SATRA TM129	Sep 97	Determination of the cold crack temperature of leather
SATRA TM130	Jan 96	Breakage of plastic lasts in bending test
SATRA TM133	Mar 93	Resistance to crack initiation and growth - belt flex method
SATRA TM134(2010)	Oct 98	Density of materials by volume displacement
SATRA TM136	Oct 96	Thickness / effective thickness of soling materials and sole units
SATRA TM137	Jun 95	Tensile properties of plastics and rubbers
SATRA TM138	Jul 01	Density of complete sole units
SATRA TM140	Jul 96	Scuff resistance - chisel method
SATRA TM141	Jul 94	Breaking force of buckles - three point bending test
SATRA TM142	May 92	Falling mass shock absorption test
SATRA TM143	Feb 95	Breaking force and extension at break of whole shoe top-lines
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM146	Mar 96	Thermal conductivity
SATRA TM147	Jun 92	Resistance to stretching and flexing
SATRA TM148	Jan 97	Resistance of finish films on upper leather to peeling and delamination
SATRA TM149	May 99	Strength of eyelet facings and other laced fastenings
SATRA TM150	Feb 99	Attachment strength of eyelets
SATRA TM151	May 99	Strength of fastened buckles
SATRA TM152	Sep 92	Print through and pressure marking
SATRA TM154	Sep 92	Shoe lace to shoe lace and shoe lace to lace carrier abrasion
SATRA TM155	Mar 99	Measurement of compressibility of composite soles
SATRA TM156	Jan 02	Resistance of heel assemblies to repeated compression

SATRA TM157	Feb 99	Determining the flammability risks with polyurethane solings
SATRA TM158	Apr 92	Washability of footwear
SATRA TM159	Feb 02	Cushioning properties
SATRA TM160	Jul 92	Colour fastness to light from a xenon arc
SATRA TM161	Nov 04	Bennewart flex test - resistance to cut growth on flexing
SATRA TM162	Jun 92	Tear strength - Baumann method
SATRA TM163	Oct 96	Abrasion resistance - Taber method
SATRA TM164	Jan 96	Universal fatigue flexing
SATRA TM165	Nov 92	Tab strength
SATRA TM166	Nov 92	Slide fastener burst strength
SATRA TM167	Apr 01	Colour fastness to rubbing - crockmeter test
SATRA TM168	Dec 92	Dimensional stability of footwear foreparts to warm humid conditions
SATRA TM169	Dec 92	Fatigue resistance of trim fastenings
SATRA TM170	Dec 92	Burst strength and distension - diaphragm method
SATRA TM171	May 95	Resistance to water penetration - penetrometer test
SATRA TM172	May 93	Water vapour permeability
SATRA TM173	May 95	Colour fastness to rubbing - reciprocating method
SATRA TM174	Mar 94	Abrasion resistance - rotating drum method
SATRA TM175	Jun 95	Attachment strength of shoe lace tags
SATRA TM176	Oct 96	Collapsing energy - impact pendulum test
SATRA TM177	Apr 95	Resistance to scuffing by mild to-and-fro abrasion
SATRA TM178	Jun 01	Water vapour absorption
SATRA TM179	Jan 96	Tear strength - wing rip method
SATRA TM180	Apr 95	Measurement of the strength of stitched seams in upper and lining materials
SATRA TM181	Aug 96	Strength of buckle and strap attachment
SATRA TM183	Nov 01	Whole shoe cushion assessment test
SATRA TM184	Jul 00	Friction of insocks
SATRA TM185	May 95	Colour fastness to water spotting of leathers, textiles and coated fabrics
SATRA TM186	Jan 01	Shape retention properties of toe caps of finished footwear
SATRA TM187	Nov 96	Stretch recovery properties - constant force ball test
SATRA TM190	Apr 02	SATRA ground insulation index
SATRA TM191	Nov 96	Resistance of PVC soles to attack by oils, fats, or dry powders
SATRA TM193	Jun 04	Abrasion resistance of leather
SATRA TM194	Jan 04	Longitudinal stiffness of footwear
SATRA TM195	Jan 04	Knot slippage test
SATRA TM197	Sept 02	Shear properties of sheet materials
SATRA TM198	Sep 99	Evaluation of surface water repellency - shoe care products
SATRA TM199	Sep 99	Water spotting - shoe care products
SATRA TM200	Sep 99	Resistance to mud staining - shoe care products
SATRA TM201	Oct 99	Water and oil repellency - shoe care products
SATRA TM202	Feb 99	Slip resistance of floorings - pendulum method
SATRA TM203	Jan 98	Tightness of screw-in studs
SATRA TM204	Jul 00	Durability of garments to washing
SATRA TM205	Feb 99	Hardness of rubber and plastics - durometer method
SATRA TM206	Feb 99	Hardness of rubber and plastics - IRHD method
SATRA TM207	May 02	Colour fastness to domestic and commercial laundering
SATRA TM208	May 02	Colourfastness to hot pressing
SATRA TM209	May 02	Dimensional stability to washing
SATRA TM210	Jul 02	Dimensional stability to dry cleaning
SATRA TM211	May 02	Dimensional stability to steam
SATRA TM212	May 02	Resistance to pilling of apparel fabrics
SATRA TM213	Oct 03	Tear strength – Elmendorf method
SATRA TM214	May 02	Crease recovery of folded fabrics
SATRA TM215	Jun 01	Transparency of swimwear
SATRA TM216	Apr 03	Shower resistance
SATRA TM217	Jun 99	Resistance to surface wetting (spray rating)
SATRA TM218	Jun 99	Tear strength of rubbers and plastics - trouser method
SATRA TM219	Aug 00	Water absorption of leather - Kubelka method
SATRA TM220	Aug 00	Dynamic water penetration test for leather - Bally permeometer method

SATRA TM222	Dec 00	Snagging test – mace method
SATRA TM223	Oct 00	Floor marking by solings or top pieces
SATRA TM225	Aug 98	Burning behaviour of slippers
SATRA TM226	Feb 99	Slider locking strength of slide fasteners
SATRA TM227	Aug 00	Assessment of fibre shedding or pile loss
SATRA TM228	Feb 02	Abrasion resistance of trims – drum method
SATRA TM229	Apr 02	Resistance of finished insoles to circular rubbing
SATRA TM230	May 02	Dynamic water penetration test
SATRA TM231	Jul 00	Glove friction force
SATRA TM233	Jul 00	Water resistance of seams – cone test
SATRA TM234	Dec 00	Relaxation shrinkage and hygral expansion of fabrics
SATRA TM235	Jul 01	Resistance to repeated wetting and drying
SATRA TM236	Jul 00	Breaking strength and tip deflection of needles
SATRA TM237	Jul 00	Needle penetration force
SATRA TM238	Dec 04	Shrinkage of foam materials
SATRA TM239	Sep 00	Loop wick test
SATRA TM240	Sep 01	Electrical resistance of footwear components
SATRA TM241	Jun 07	Luggage handle strength – static loading
SATRA TM242	Sep 08	Luggage corner impact strength – drop test
SATRA TM243	Sep 08	Luggage handle strength ‘snatch’ test
SATRA TM244	Jun 07	Luggage fittings attachment strength
SATRA TM245	Jun 07	Luggage trolley handles – collapsing strength
SATRA TM246	Jun 07	Luggage trolley handles – bending strength
SATRA TM247	Dec 07	Luggage handle strength – repeated lifting
SATRA TM248	Jun 07	Performance of wheels systems – rolling road
SATRA TM249	Jun 07	Luggage – Puncture resistance
SATRA TM250	Apr 02	Scuff resistance of solings
SATRA TM251	Jan 04	Measurement of lasts for women’s medium range fashion footwear
SATRA TM252	Feb 98	Method of measurement of lasts for men’s closed toe footwear
SATRA TM254	Jun 03	Evaluation of degradation of elastanes in swimwear
SATRA TM255	Mar 02	Durability of garments and fabrics to wet cleaning
SATRA TM256	Feb 02	Torsional stiffness of footwear
SATRA TM257	Sep 09	Fatigue resistance of pedestal-chair clutch-assemblies
SATRA TM259	Dec 07	Determination of resistance to water penetration – hydrostatic pressure test
SATRA TM260	Sep 09	Phenolic (elusive) yellowing of textiles
SATRA TM264	Apr 02	Spotting tack and green strength of furniture foam bonding adhesives
SATRA TM269	Sep 09	Seam slippage of woven fabrics
SATRA TM271	Oct 08	Determination of blocking resistance of coated materials
SATRA TM273	Nov 07	Schildknecht flex test – resistance to creasing and cracking
SATRA TM274	Feb 02	Water vapour permeability of clothing membrane materials
SATRA TM275	May 02	Security of attachment of stones or inlays
SATRA TM276	May 02	Tensile strength of looped jewellery
SATRA TM277	Jan 04	Determination of organotin compounds
SATRA TM278	Sept 02	Moisture transfer test for insoles
SATRA TM279	Feb 02	Accelerated conditioning procedure for leather
SATRA TM281	Sep 02	Peel strength of bottom constructions in complete footwear
SATRA TM298	Mar 03	Determination of TCMTB (2-Thiocyanomethylthio) – Benzothiazole) content
SATRA TM302	Jun 03	Star-burst strength of leather
SATRA TM303	Apr 95	Vegetable tans content - qualitative test
SATRA TM304	Mar 98	Qualitative tests for soluble colour in upper and lining materials
SATRA TM305	Mar 98	Wick test
SATRA TM307	Jun 99	Water soluble chloride content of leather
SATRA TM309	Apr 95	Soil burial deterioration
SATRA TM310	Sep 92	Atmospheric sulphide tarnishing and salt water corrosion
SATRA TM313	Jan 98	Organic dressing and salts content of fabrics
SATRA TM319	Jan 01	Determination of para-nitrophenol in leather by infra-red analysis
SATRA TM323	Jul 98	Qualitative test for acidity in leather
SATRA TM324	Mar 99	Thermal stability of PVC - Congo red test
SATRA TM325	Jun 99	Leaching test for plasticised PVC compounds
SATRA TM326	Jun 95	Plasticiser volatility - activated carbon method

SATRA TM327	Jul 01	The K value of PVC soling compounds
SATRA TM328	May 92	Hydrolysis of polyurethane based sheet materials
SATRA TM329	Sep 95	Water soluble matter content of leather
SATRA TM331	Jun 99	The estimation of soluble chrome in leather
SATRA TM332	Sep 92	Chemical analysis of polyurethanes
SATRA TM335	Dec 94	Colour fastness to water and perspiration
SATRA TM336	Apr 97	Binder content and type in cellulose insole boards
SATRA TM337(2009)	May 92	Concentration of airborne dust and rubber fume
SATRA TM338	Dec 92	Salzman test - detection of contamination by oxides of nitrogen
SATRA TM339	Jul 92	Dabco discolouration test - contamination by amines
SATRA TM340	Aug 92	Determination of acetone soluble matter and copper
SATRA TM341	Nov 92	Oxides of nitrogen discolouration test
SATRA TM342	Jun 95	Determination of pentachlorophenol
SATRA TM343	Nov 92	Contact storage test for discolouration
SATRA TM344	Apr 95	Hydrolysis of polyurethane solings and polyurethane coated leathers
SATRA TM345	Aug 96	Solvent soluble matter in polymeric materials
SATRA TM346	Jun 94	Fat and free fatty acids content of leather
SATRA TM347	Jan 96	Volatile matter content
SATRA TM348	Jan 96	Ash and chromic oxide content of leather
SATRA TM349	Jan 96	Acidity - pH value and pH difference figure - of an aqueous extract
SATRA TM350	Jun 95	Analysis of solvent vapour adsorption badges and tubes
SATRA TM351	Dec 96	Bottle incubation test
SATRA TM352	Jun 99	Distinguishing between types of polyurethane
SATRA TM353	Mar 99	Ash content of polymeric materials
SATRA TM354	Jan 98	Qualitative test for the presence of nickel
SATRA TM355	Feb 99	Colour fastness to dry cleaning
SATRA TM356	Feb 99	Colour fastness of textiles to chlorinated water (swimming-pool water)
SATRA TM357	Jan 04	Colour fastness to sodium perborate
SATRA TM358	May 99	Extractable chromium in leather
SATRA TM359	Jul 00	Nitrocellulose finishes – qualitative test
SATRA TM361	Jan 10	Bloom formation of polymeric materials (Accelerated ageing test)
SATRA TM362	Sep 08	Abrasion resistance of soles-Biomechanical method
SATRA TM376	Feb 09	Advanced moisture management test
SATRA TM388	Jun 08	The quantitative determination of Octylphenol (OP) Octylphenol ethoxylate (OPE) Nonylphenol (NP) and Nonylphenol ethoxylate (NPE)
SATRA TM401	July 00	Peel strength of adhesive bonds
SATRA TM402	Apr 97	Preparation of bonded test assemblies for adhesion tests
SATRA TM402	Sep 05	Supplement No. 1
SATRA TM403	Jan 96	Resistance to heat of adhesive bonds - constant peel force method (creep test)
SATRA TM404	Jul 92	Rapid sole adhesion test - for complete footwear
SATRA TM405	Dec 97	Determination of shear and peel strength of insole ribs
SATRA TM406	Feb 99	Lacquer adhesion - cross hatch test
SATRA TM408	Oct 93	Adhesion of finish - deadweight method
SATRA TM409	May 93	Heat resistance/heat ageing of sole bonds in complete footwear
SATRA TM410	Apr 95	Adhesion strength of a coating to its base
SATRA TM411	May 92	Peel strength of footwear sole bonds
SATRA TM414	May 92	Preparation of hot melt bonded assemblies for peel tests
SATRA TM416	Oct 96	Determination of film or coating adhesion to base material
SATRA TM417	Apr 97	Cleavage test for heel lift lamination strength
SATRA TM419	May 95	Spotting tack of adhesive bonds
SATRA TM420	Jul 94	Resistance to heat of pressure sensitive adhesive bonds constant shearing force method
SATRA TM422	Dec 94	Immediate (“green”) peel strength of adhesive bonds
SATRA TM425	Feb 99	Peel strength of laminated fabrics
SATRA TM426	Mar 00	Spotting tack - instrumental method
SATRA TM428	Dec 09	The quantitative determination of total metals using microwave digestion followed by inductively coupled plasma optical emission spectrometry (ICP-OES)

TEST METHOD LIST - MATERIAL TYPE / COMPONENT / PRODUCT

TESTS APPLICABLE TO SEVERAL MATERIAL TYPES (also included under the specific material headings)

SATRA TM6	Mar 93	Water absorption and desorption - total immersion method
SATRA TM8	Jun 04	Colour fastness to circular rubbing
SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM11	Jan 93	Pin holding strength of insole materials
SATRA TM14	Nov 04	Resistance to scuffing by mild circular abrasion
SATRA TM18	Aug 95	Shape retention - dome plastimeter method
SATRA TM24	Apr 92	Lastometer ball burst test
SATRA TM25	May 92	Vamp flex test - resistance to creasing and cracking
SATRA TM28	Jul 94	Mass per unit area
SATRA TM31(2005)	Apr 03	Abrasion resistance - Martindale method
SATRA TM34(2009)	Mar 93	Resistance to water penetration – Maeser test
SATRA TM35	Jul 94	Static friction
SATRA TM44	May 94	Liability to wrinkle
SATRA TM49	Apr 95	Resistance to damage due to contact with a hot surface
SATRA TM55	Mar 99	Flexing resistance of upper materials – Bally flexometer
SATRA TM80	Apr 92	Transverse tensile strength of sheet materials
SATRA TM84	Mar 97	Abrasion resistance - reciprocating method
SATRA TM98	Jun 92	Dimensional stability with changes in atmospheric humidity
SATRA TM101	May 93	Surface peel strength of insole materials
SATRA TM140	Jul 96	Scuff resistance - chisel method
SATRA TM146	Mar 96	Thermal conductivity
SATRA TM147	Jun 92	Resistance to stretching and flexing
SATRA TM159	Feb 02	Cushioning properties (undergoing major revision)
SATRA TM160	Jul 92	Colour fastness to light from a xenon arc
SATRA TM163	Oct 96	Abrasion resistance - Taber method
SATRA TM164	Jan 96	Universal fatigue flexing
SATRA TM167	Apr 01	Colour fastness to rubbing - crockmeter test
SATRA TM170	Dec 92	Burst strength and distension - diaphragm method
SATRA TM171	May 95	Resistance to water penetration - penetrometer test
SATRA TM173	May 95	Colour fastness to rubbing - reciprocating method
SATRA TM177	Apr 95	Resistance to scuffing by mild to-and-fro abrasion
SATRA TM179	Jan 96	Tear strength - wing rip method
SATRA TM277	Jan 04	Determination of organotin compounds
SATRA TM305	Mar 98	Wick test
SATRA TM338	Dec 92	Salzman test - detection of contamination by oxides of nitrogen
SATRA TM341	Nov 92	Oxides of nitrogen discolouration test
SATRA TM342	Jun 95	Determination of pentachlorophenol
SATRA TM343	Nov 92	Contact storage test for discolouration
SATRA TM351	Dec 96	Bottle incubation test
SATRA TM401	Jul 00	Peel strength of adhesive bonds
SATRA TM402	Apr 97	Preparation of bonded test assemblies for adhesion tests
SATRA TM402	Sep 05	Supplement No. 1
SATRA TM403	Jan 96	Resistance to heat of adhesive bonds - constant peel force method (creep test)
SATRA TM414	May 92	Preparation of hot melt bonded assemblies for peel tests
SATRA TM419	May 95	Spotting tack of adhesive bonds
SATRA TM420	Jul 94	Resistance to heat of pressure sensitive adhesive bonds constant shearing force method
SATRA TM422	Dec 94	Immediate (“green”) peel strength of adhesive bonds

ADHESIVES

SATRA TM264	Apr 02	Spotting tack and green strength of furniture foam bonding adhesives
SATRA TM281	Sep 02	Peel strength of bottom constructions in complete footwear
SATRA TM401	Jul 00	Peel strength of adhesive bonds

SATRA TM402	Apr 97	Preparation of bonded test assemblies for adhesion tests
SATRA TM402	Sep 05	Supplement No. 1
SATRA TM403	Jan 96	Resistance to heat of adhesive bonds - constant peel force method (creep test)
SATRA TM404	Jul 92	Rapid sole adhesion test - for complete footwear
SATRA TM409	May 93	Heat resistance/heat ageing of sole bonds in complete footwear
SATRA TM411	May 92	Peel strength of footwear sole bonds
SATRA TM414	May 92	Preparation of hot melt bonded assemblies for peel tests
SATRA TM419	May 95	Spotting tack of adhesive bonds
SATRA TM420	Jul 94	Resistance to heat of pressure sensitive adhesive bonds constant hearing force method
SATRA TM422	Dec 94	Immediate ("green") peel strength of adhesive bonds
SATRA TM426	Mar 00	Spotting tack – instrumental method

AIR POLLUTANTS

SATRA TM337(2009)	May 92	Concentration of airborne dust and rubber fume
SATRA TM350	Jun 95	Analysis of solvent vapour adsorption badges and tubes

SHOE BOTTOMS

SATRA TM37	May 99	Nail penetration - shoe bottoms and protective midsoles
SATRA TM58	May 99	Stiffness of steel shanks
SATRA TM59	Sep 00	Longitudinal stiffness of insole backparts
SATRA TM86	Jul 01	Impact test for rigid units and shoe bottoms
SATRA TM87	Jan 98	Fatigue test for rigid sole units and shoe bottoms
SATRA TM112	Apr 95	Fatigue resistance of insole backparts and backpart components
SATRA TM118	Aug 92	Strength of sandal toe posts
SATRA TM142	May 92	Falling mass shock absorption test
SATRA TM159	Feb 02	Cushioning properties
SATRA TM203	Jan 98	Tightness of screw-in studs
SATRA TM238	Dec 04	Shrinkage of foam materials
SATRA TM281	Sep 02	Peel strength of bottom constructions in complete footwear
SATRA TM404	Jul 92	Rapid sole adhesion test - for complete footwear
SATRA TM411	May 92	Peel strength of footwear sole bonds

FASTENERS, BUCKLES & TRIMS

SATRA TM50	Dec 92	Resistance of slide fasteners to repeated opening and closing
SATRA TM51	Aug 93	Lateral strength of slide fasteners
SATRA TM52	Jan 02	Strength of slide fastener pullers
SATRA TM53	Sep 92	Attachment strength of slide fastener end stops
SATRA TM85	Jul 94	Resistance of slide fasteners to damage during closure under a lateral force
SATRA TM117	Dec 92	Attachment strength of decorative bows
SATRA TM123	Jul 92	Closure strength of touch and close fasteners
SATRA TM126	Jul 00	Fatigue resistance of buckled fastenings
SATRA TM141	Jul 94	Breaking force of buckles - three point bending test
SATRA TM151	May 99	Strength of fastened buckles
SATRA TM166	Nov 92	Slide fastener burst strength
SATRA TM169	Dec 92	Fatigue resistance of trim fastenings
SATRA TM181	Aug 96	Strength of buckle and strap attachment
SATRA TM226	Feb 99	Slider locking strength of slide fasteners
SATRA TM228	Feb 02	Abrasion resistance of trims – drum method
SATRA TM275	May 02	Security of attachment of stones or inlays
SATRA TM310	Sep 92	Atmospheric sulphide tarnishing and salt water corrosion
SATRA TM354	Jan 98	Qualitative test for the presence of nickel

FINISHED CLOTHING

SATRA TM204	Jul 00	Durability of garments to washing
SATRA TM207	May 02	Colour fastness to domestic and commercial laundering
SATRA TM208	May 02	Colourfastness to hot pressing
SATRA TM209	May 02	Dimensional stability to washing
SATRA TM210	Jul 02	Dimensional stability to dry cleaning
SATRA TM211	May 02	Dimensional stability to steam
SATRA TM212	May 02	Resistance to pilling of apparel fabrics
SATRA TM213	Oct 03	Tear strength – Elmendorf method
SATRA TM214	May 02	Crease recovery of folded fabrics
SATRA TM215	Jun 01	Transparency of swimwear
SATRA TM216	Apr 03	Shower resistance
SATRA TM217	Jun 99	Resistance to surface wetting (spray rating)
SATRA TM222	Dec 00	Snagging test – mace method
SATRA TM231	Jul 00	Glove friction force
SATRA TM254	Jun 03	Evaluation of degradation of elastanes in swimwear
SATRA TM255	Mar 02	Durability of garments and fabrics to wet cleaning
SATRA TM355	Feb 99	Colour fastness to dry cleaning
SATRA TM356	Feb 99	Colour fastness of textiles to chlorinated water (swimming-pool water)
SATRA TM357	Jan 04	Colour fastness to sodium perborate

FLOORINGS

SATRA TM202	Feb 99	Slip resistance of floorings - pendulum method
SATRA TM223	Oct 00	Floor markings by solings or top pieces

FOOT AND LAST MEASUREMENT

SATRA TM251	Jan 04	Measurement of lasts for women's medium range fashion footwear
SATRA TM252	Feb 98	Method of measurement of lasts for men's closed toe footwear

FURNITURE

SATRA TM257	Sep 09	Fatigue resistance of pedestal-chair clutch-assemblies
SATRA TM428	Dec 09	The quantitative determination of total metals using microwave digestion followed by inductively coupled plasma optical emission spectrometry (ICP-OES)

HEELS

SATRA TM19	Aug 01	Dimensional measurements of plastic heels
SATRA TM20	Aug 00	Lateral impact test for shoe heels
SATRA TM21	Jul 01	Fatigue test for shoe heels
SATRA TM96	Sep 95	Security of heel pins
SATRA TM108	Sep 92	Strength of top-piece attachment
SATRA TM113	Dec 96	Measurement of the strength of attachment of heels to footwear and the backpart rigidity of such footwear
SATRA TM115	Aug 00	Torsion strength of the top piece attachment
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM156	Jan 02	Resistance of heel assemblies to repeated compression
SATRA TM406	Feb 99	Lacquer adhesion - cross hatch test
SATRA TM417	Apr 97	Cleavage test for heel lift lamination strength

INSOLES

SATRA TM1	Nov 04	Thickness of leather and insole materials
SATRA TM2	May 95	Tensile properties of insole materials
SATRA TM3	Mar 99	Flexing index
SATRA TM4	Mar 93	Change in flexing index due to exposure to heat
SATRA TM5	May 00	Stitch-tear strength
SATRA TM6	Mar 93	Water absorption and desorption - total immersion method
SATRA TM9	Nov 92	Surface water absorption and repellency
SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM11	Jan 93	Pin holding strength of insole materials
SATRA TM12	Mar 93	Density of leather and insole materials
SATRA TM14	Nov 04	Resistance to scuffing by mild circular abrasion
SATRA TM58	May 99	Stiffness of steel shanks
SATRA TM59	Sep 00	Longitudinal stiffness of insole backparts
SATRA TM65	May 92	Split tear strength
SATRA TM88	Aug 01	Measurement of the torsional stiffness of insole backparts
SATRA TM97	Feb 99	Fatigue test for steel shanks
SATRA TM98	Jun 92	Dimensional stability with changes in atmospheric humidity
SATRA TM101	May 93	Surface peel strength of insole materials
SATRA TM112	Apr 95	Fatigue resistance of insole backparts and backpart components
SATRA TM121	Mar 98	Shrinkage of insole materials on repeated wetting and drying
SATRA TM125	Sep 92	Hardness - Rockwell 'C' method
SATRA TM177	Apr 95	Resistance to scuffing by mild to-and-fro abrasion
SATRA TM184	Jul 00	Friction of insoles
SATRA TM197	Sep 02	Shear properties of sheet materials
SATRA TM229	Apr 02	Resistance of finished insoles to circular rubbing
SATRA TM240	Sep 01	Electrical resistance of footwear components
SATRA TM278	Sep 02	Moisture transfer test for insoles
SATRA TM303	Apr 95	Vegetable tans content - qualitative test
SATRA TM305	Mar 98	Wick test
SATRA TM323	Jul 98	Qualitative test for acidity in leather
SATRA TM336	Apr 97	Binder content and type in cellulose insole boards
SATRA TM405	Dec 97	Determination of shear and peel strength of insole ribs

JEWELLERY

SATRA TM275	May 02	Security of attachment of stones or inlays
SATRA TM276	May 02	Tensile strength of looped jewellery

LACES AND EYELETS

SATRA TM93	Feb 93	Abrasion between shoe laces and eyelets
SATRA TM94	Jun 93	Breaking force and extension at break of shoe laces
SATRA TM149	May 99	Strength of eyelet facings and other laced fastenings
SATRA TM150	Feb 99	Attachment strength of eyelets
SATRA TM154	Sep 92	Shoe lace to shoe lace and shoe lace to lace carrier abrasion
SATRA TM165	Nov 92	Tab strength
SATRA TM175	Jun 95	Attachment strength of shoe lace tags
SATRA TM195	Jan 04	Knot slippage test
SATRA TM239	Sep 00	Loop wick test

LASTS

SATRA TM130	Jan 96	Breakage of plastic lasts in bending test
SATRA TM251	Jan 04	Measurement of lasts for women's medium range fashion footwear
SATRA TM252	Feb 98	Method of measurement of lasts for men's closed toe footwear

LEATHER - GENERAL

SATRA TM1	Nov 04	Thickness of leather and insole materials
SATRA TM17	Apr 97	Shrinkage temperature of leather
SATRA TM95	Jul 96	Abrasion and snagging resistance - drum method
SATRA TM178	Jun 01	Water vapour absorption
SATRA TM279	Feb 02	Accelerated conditioning procedure for leather
SATRA TM298	Mar 03	Determination of TCMTB (2-Thiocyanomethylthio) – Benzothiazole) content
SATRA TM302	Jun 03	Star-burst strength of leather
SATRA TM303	Apr 95	Vegetable tans content - qualitative test
SATRA TM307	Jun 99	Water soluble chloride content of leather
SATRA TM329	Sep 95	Water soluble matter content of leather
SATRA TM331	Jun 99	The estimation of soluble chrome in leather
SATRA TM346	Jun 94	Fat and free fatty acids content of leather
SATRA TM347	Jan 96	Volatile matter content
SATRA TM348	Jan 96	Ash and chromic oxide content of leather
SATRA TM349	Jan 96	Acidity - pH value and pH difference figure - of an aqueous extract
SATRA TM358	May 99	Extractable chromium in leather
SATRA TM359	Jul 00	Nitrocellulose finishes – qualitative test
SATRA TM388	Jun 08	The quantitative determination of Octylphenol (OP) Octylphenol ethoxylate (OPE) Nonylphenol (NP) and Nonylphenol ethoxylate (NPE) SATRA

LEATHER – UPPERS AND LININGS

SATRA TM8	Jun 04	Colour fastness to circular rubbing
SATRA TM9	Nov 92	Surface water absorption and repellency
SATRA TM18	Aug 95	Shape retention - dome plastimeter method
SATRA TM23	Nov 04	The SATRA/PATRA water vapour permeability test for shoe upper materials
SATRA TM24	Apr 92	Lastometer ball burst test
SATRA TM25	May 92	Vamp flex test - resistance to creasing and cracking
SATRA TM28	Jul 94	Mass per unit area
SATRA TM29	Nov 92	Breaking strength and extension at break
SATRA TM31(2005)	Apr 03	Abrasion resistance - Martindale method
SATRA TM33	Nov 92	Strength perpendicular to needle perforations
SATRA TM34(2009)	Mar 93	Resistance to water penetration - Maeser test
SATRA TM35	Jul 94	Static friction
SATRA TM36	May 99	Break/pipiness
SATRA TM38	May 99	Impact scuff test for upper leather
SATRA TM43	Mar 88	Measurement of tensile strength and extension at break of leather
SATRA TM44	May 94	Liability to wrinkle
SATRA TM47	Jun 02	Water vapour permeability and absorption
SATRA TM55	Mar 99	Flexing resistance of upper materials – Bally flexometer
SATRA TM105	Feb 95	Resistance to surface peeling due to scraping when hot
SATRA TM116	Aug 00	Assessment of the hot stress cracking of patent leather finishes using the Zwik tester
SATRA TM129	Sep 97	Determination of the cold crack temperature of leather
SATRA TM140	Jul 96	Scuff resistance - chisel method
SATRA TM148	Jan 97	Resistance of finish films on upper leather to peeling and delamination
SATRA TM152	Sep 92	Print through and pressure marking
SATRA TM162	Jun 92	Tear strength - Baumann method
SATRA TM163	Oct 96	Abrasion resistance - Taber method
SATRA TM167	Apr 01	Colour fastness to rubbing - crockmeter test
SATRA TM170	Dec 92	Burst strength and distension - diaphragm method
SATRA TM171	May 95	Resistance to water penetration - penetrometer test
SATRA TM172	May 93	Water vapour permeability
SATRA TM173	May 95	Colour fastness to rubbing - reciprocating method
SATRA TM178	Jun 01	Water vapour absorption
SATRA TM179	Jan 96	Tear strength - wing rip method

SATRA TM185	May 95	Colour fastness to water spotting of leathers, textiles and coated fabrics
SATRA TM187	Nov 96	Stretch recovery properties - constant force ball test
SATRA TM198	Sep 99	Evaluation of surface water repellency - shoe care products
SATRA TM199	Sep 99	Water spotting - shoe care products
SATRA TM200	Sep 99	Resistance to mud staining - shoe care products
SATRA TM201	Oct 99	Water and oil repellency - shoe care products
SATRA TM219	Aug 00	Water absorption of leather – Kubelka method
SATRA TM235	Jul 01	Resistance to repeated wetting and drying
SATRA TM236	Jul 00	Breaking strength and tip deflection of needles
SATRA TM237	Jul 00	Needle penetration force
SATRA TM303	Apr 95	Vegetable tans content – qualitative test
SATRA TM304	Mar 98	Qualitative tests for soluble colour in upper and lining materials
SATRA TM305	Mar 98	Wick test
SATRA TM335	Dec 94	Colour fastness to water and perspiration
SATRA TM339	Jul 92	Dabco discolouration test - contamination by amines
SATRA TM344	Apr 95	Hydrolysis of polyurethane solings and polyurethane coated leathers
SATRA TM359	Jul 00	Nitrocellulose finishes – qualitative test
SATRA TM361	Jan 10	Bloom formation of polymeric materials (Accelerated ageing test)
SATRA TM408	Oct 93	Adhesion of finish - deadweight method
SATRA TM416	Oct 96	Determination of film or coating adhesion to base material

LUGGAGE

SATRA TM241	Jun 07	Luggage handle strength – static loading
SATRA TM242	Sep 08	Luggage corner impact strength – drop test
SATRA TM243	Sep 08	Luggage handle strength 'snatch' test
SATRA TM244	Jun 07	Luggage fittings attachment strength
SATRA TM245	Jun 07	Luggage trolley handles – collapsing strength
SATRA TM246	Jun 07	Luggage trolley handles – bending strength
SATRA TM247	Dec 07	Luggage handle strength – repeated lifting
SATRA TM248	Jun 07	Performance of wheels systems – rolling road
SATRA TM249	Jun 07	Luggage – Puncture resistance

SOLINGS - LEATHER

SATRA TM5	May 00	Stitch-tear strength
SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM12	Mar 93	Density of leather and insole materials
SATRA TM41	May 99	Dynamic water penetration test for sole leather
SATRA TM48	Aug 96	Determination of grain crack index for sole leathers
SATRA TM84	Mar 97	Abrasion resistance - reciprocating method
SATRA TM136	Oct 96	Thickness / effective thickness of soling materials and sole units
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM193	Jun 04	Abrasion resistance of leather
SATRA TM220	Aug 00	Dynamic water penetration test for leather – Bally permeometer method
SATRA TM303	Apr 95	Vegetable tans content - qualitative test
SATRA TM319	Jan 01	Determination of para-nitrophenol in leather by infra-red analysis
SATRA TM323	Aug 98	Qualitative test for acidity in leather

SOLINGS - POLYURETHANE

SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM60	Jul 92	Ross flex test - resistance to cut growth on flexing
SATRA TM63	Sep 09	Oil swelling test for sole materials
SATRA TM64	Jan 96	Compression set - constant stress method
SATRA TM65	May 92	Split tear strength
SATRA TM68	Nov 92	Density of cellular materials

SATRA TM70	Jul 01	Heat shrinkage of cellular solings
SATRA TM76	Jul 01	Water absorption of cellular solings by the vacuum method
SATRA TM133	Mar 93	Resistance to crack initiation and growth - belt flex method
SATRA TM136	Oct 96	Thickness / effective thickness of soling materials and sole units
SATRA TM137	Jun 95	Tensile properties of plastics and rubbers
SATRA TM138	Jul 01	Density of complete sole units
SATRA TM142	May 92	Falling mass shock absorption test
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM155	Mar 99	Measurement of compressibility of composite soles
SATRA TM157	Feb 99	Determining the flammability risks with polyurethane solings
SATRA TM159	Feb 02	Cushioning properties
SATRA TM161	Nov 04	Bennewart flex test - resistance to cut growth on flexing
SATRA TM174	Mar 94	Abrasion resistance - rotating drum method
SATRA TM205	Feb 99	Hardness of rubber and plastics - durometer method
SATRA TM206	Feb 99	Hardness of rubber and plastics - IRHD method
SATRA TM218	Jun 99	Tear strength of rubbers and plastics - trouser method
SATRA TM223	Oct 00	Floor marking by solings or top pieces
SATRA TM240	Sep 01	Electrical resistance of footwear components
SATRA TM250	Apr 02	Scuff resistance of solings
SATRA TM309	Apr 95	Soil burial deterioration
SATRA TM328	May 92	Hydrolysis of polyurethane based sheet materials
SATRA TM332	Sep 92	Chemical analysis of polyurethanes
SATRA TM344	Apr 95	Hydrolysis of polyurethane solings and polyurethane coated leathers
SATRA TM345	Aug 96	Solvent soluble matter in polymeric materials
SATRA TM352	Jun 99	Distinguishing between types of polyurethane

SOLINGS – PVC, TR AND OTHER THERMOPLASTIC

SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM60	Jul 92	Ross flex test - resistance to cut growth on flexing
SATRA TM63	Sep 09	Oil swelling test for sole materials
SATRA TM64	Jan 96	Compression set - constant stress method
SATRA TM65	May 92	Split tear strength
SATRA TM68	Nov 92	Density of cellular materials
SATRA TM70	Jul 01	Heat shrinkage of cellular solings
SATRA TM76	Jul 01	Water absorption of cellular solings by the vacuum method
SATRA TM133	Mar 93	Resistance to crack initiation and growth - belt flex method
SATRA TM134(2010)	Oct 98	Density of materials by volume displacement
SATRA TM136	Oct 96	Thickness / effective thickness of soling materials and sole units
SATRA TM137	Jun 95	Tensile properties of plastics and rubbers
SATRA TM138	Jul 01	Density of complete sole units
SATRA TM142	May 92	Falling mass shock absorption test
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM155	Mar 99	Measurement of compressibility of composite soles
SATRA TM161	Nov 04	Bennewart flex test - resistance to cut growth on flexing
SATRA TM174	Mar 94	Abrasion resistance - rotating drum method
SATRA TM191	Nov 96	Resistance of PVC soles to attack by oils, fats, or dry powders
SATRA TM205	Feb 99	Hardness of rubber and plastics - durometer method
SATRA TM206	Feb 99	Hardness of rubber and plastics - IRHD method
SATRA TM218	Jun 99	Tear strength of rubbers and plastics - trouser method
SATRA TM223	Oct 00	Floor marking by solings or top pieces
SATRA TM240	Sep 01	Electrical resistance of footwear components
SATRA TM250	Apr 02	Scuff resistance of solings
SATRA TM324	Mar 99	Thermal stability of PVC - Congo red test
SATRA TM325	Jun 99	Leaching test for plasticised PVC compounds
SATRA TM326	Jun 95	Plasticiser volatility - activated carbon method
SATRA TM327	Jul 01	The K value of PVC soling compounds
SATRA TM345	Aug 96	Solvent soluble matter in polymeric materials
SATRA TM353	Mar 99	Ash content of polymeric materials

SOLINGS – RUBBER, EVA AND OTHER CROSSLINKED

SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM40	Mar 99	Moulded-on rubber soles - state of cure test
SATRA TM60	Jul 92	Ross flex test - resistance to cut growth on flexing
SATRA TM63	Sep 09	Oil swelling test for sole materials
SATRA TM64	Jan 96	Compression set - constant stress method
SATRA TM68	Nov 92	Density of cellular materials
SATRA TM70	Jul 01	Heat shrinkage of cellular solings
SATRA TM76	Jul 01	Water absorption of cellular solings by the vacuum method
SATRA TM133	Mar 93	Resistance to crack initiation and growth - belt flex method
SATRA TM134(2010)	Oct 98	Density of materials by volume displacement
SATRA TM136	Oct 96	Thickness / effective thickness of soling materials and sole units
SATRA TM137	Jun 95	Tensile properties of plastics and rubbers
SATRA TM142	May 92	Falling mass shock absorption test
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM155	Mar 99	Measurement of compressibility of composite soles
SATRA TM159	Feb 02	Cushioning properties
SATRA TM161	Nov 04	Bennewart flex test - resistance to cut growth on flexing
SATRA TM174	Mar 94	Abrasion resistance - rotating drum method
SATRA TM205	Feb 99	Hardness of rubber and plastics - durometer method
SATRA TM206	Feb 99	Hardness of rubber and plastics - IRHD method
SATRA TM218	Jun 99	Tear strength of rubbers and plastics - trouser method
SATRA TM223	Oct 00	Floor marking by solings or top pieces
SATRA TM240	Sep 01	Electrical resistance of footwear components
SATRA TM250	Apr 02	Scuff resistance of solings
SATRA TM340	Aug 92	Determination of acetone soluble matter and copper
SATRA TM345	Aug 96	Solvent soluble matter in polymeric materials
SATRA TM353	Mar 99	Ash content of polymeric materials
SATRA TM362	Sep 08	Abrasion resistance of soles - Biomechanical method

TEXTILES AND COATED TEXTILES, INCLUDING SYNTHETIC UPPERS AND LININGS

SATRA TM8	Jun 04	Colour fastness to circular rubbing
SATRA TM9	Nov 92	Surface water absorption and repellency
SATRA TM18	Aug 95	Shape retention - dome plastimeter method
SATRA TM23	Nov 04	The SATRA/PATRA water vapour permeability test for shoe upper materials.
SATRA TM24	Apr 92	Lastometer ball burst test
SATRA TM25	May 92	Vamp flex test - resistance to creasing and cracking
SATRA TM27	Nov 04	Thickness of non-leather flexible sheet materials
SATRA TM28	Jul 94	Mass per unit area
SATRA TM29	Nov 92	Breaking strength and extension at break
SATRA TM30	Sep 95	Tear strength - trouser leg method
SATRA TM31(2005)	Apr 03	Abrasion resistance - Martindale method
SATRA TM33	Nov 92	Strength perpendicular to needle perforations
SATRA TM34(2009)	Mar 93	Resistance to water penetration - Maeser test
SATRA TM35	Jul 94	Static friction
SATRA TM36	May 99	Break/pipiness
SATRA TM41	May 99	Dynamic water penetration test for sole leather
SATRA TM44	May 94	Liability to wrinkle
SATRA TM47	Jun 02	Water vapour permeability and absorption
SATRA TM55	Mar 99	Flexing resistance of upper materials – Bally flexometer
SATRA TM95	Jul 96	Abrasion and snagging resistance - drum method
SATRA TM105	Feb 95	Resistance to surface peeling due to scraping when hot
SATRA TM106	Dec 94	Breaking force, extension at break and tightness of tapes and bindings
SATRA TM111	Jul 00	Tendency to wrinkle of polyurethane coated fabrics
SATRA TM116	Aug 00	Hot stress cracking of patent leather finishes – Zwik tester
SATRA TM140	Jul 96	Scuff resistance - chisel method

SATRA TM152	Sep 92	Print through and pressure marking
SATRA TM163	Oct 96	Abrasion resistance - Taber method
SATRA TM167	Apr 01	Colour fastness to rubbing - crockmeter test
SATRA TM170	Dec 92	Burst strength and distension - diaphragm method
SATRA TM178	Jun 01	Water vapour absorption
SATRA TM179	Jan 96	Tear strength - wing rip method
SATRA TM185	May 95	Colour fastness to water spotting of leathers, textiles and coated fabrics
SATRA TM187	Nov 96	Stretch recovery properties - constant force ball test
SATRA TM198	Sep 99	Evaluation of surface water repellency - shoe care products
SATRA TM199	Sep 99	Water spotting - shoe care products
SATRA TM200	Sep 99	Resistance to mud staining - shoe care products
SATRA TM201	Oct 99	Water and oil repellency - shoe care products
SATRA TM227	Aug 00	Assessment of fibre shedding or pile loss
SATRA TM231	Jul 00	Glove friction force
SATRA TM234	Dec 00	Relaxation shrinkage and hygral expansion of fabrics
SATRA TM236	Jul 00	Breaking strength and tip deflection of needles
SATRA TM237	Jul 00	Needle penetration force
SATRA TM254	Jun 03	Evaluation of degradation of elastanes in swimwear
SATRA TM255	Mar 02	Durability of garments and fabrics to wet cleaning
SATRA TM259	Dec 07	Determination of resistance to water penetration – hydrostatic pressure test
SATRA TM260	Sep 09	Phenolic (elusive) yellowing of textiles
SATRA TM269	Sep 09	Seam slippage of woven fabrics
SATRA TM271	Oct 08	Determination of blocking resistance of coated materials
SATRA TM273	Nov 07	Schildknecht flex test – resistance to creasing and cracking
SATRA TM274	Feb 02	Water vapour permeability of clothing membrane materials
SATRA TM304	Mar 98	Qualitative tests for soluble colour in upper and lining materials
SATRA TM309	Apr 95	Soil burial deterioration
SATRA TM313	Jan 98	Organic dressing and salts content of fabrics
SATRA TM323	Jul 98	Qualitative test for acidity in leather
SATRA TM328	May 92	Hydrolysis of polyurethane based sheet materials
SATRA TM335	Dec 94	Colour fastness to water and perspiration
SATRA TM339	Jul 92	Dabco discolouration test - contamination by amines
SATRA TM344	Apr 95	Hydrolysis of polyurethane solings and polyurethane coated leathers
SATRA TM347	Jan 96	Volatile matter content
SATRA TM349	Jan 96	Acidity - pH value and pH difference figure - of an aqueous extract
SATRA TM361	Jan 10	Bloom formation of polymeric materials (Accelerated ageing test)
SATRA TM388	Jun 08	The quantitative determination of Octylphenol (OP) Octylphenol ethoxylate (OPE) Nonylphenol (NP) and Nonylphenol ethoxylate (NPE)
SATRA TM408	Oct 93	Adhesion of finish - deadweight method
SATRA TM410	Apr 95	Adhesion strength of a coating to its base
SATRA TM416	Oct 96	Determination of film or coating adhesion to base material
SATRA TM425	Feb 99	Peel strength of laminated fabrics

THREADS AND ELASTICS

SATRA TM45	Mar 98	Stitchability of upper threads
SATRA TM72	May 94	Linear density
SATRA TM73	Jul 00	Twists per unit length of threads
SATRA TM74	Jun 94	Breaking force, extension at break, strength factor and tightness of threads
SATRA TM95	Jul 96	Abrasion and snagging resistance - drum method
SATRA TM102	Jun 99	Measurement of the limit of useful extension of elastics
SATRA TM103	Aug 92	Resistance of elastics to repeated extension
SATRA TM106	Dec 94	Breaking force, extension at break and lightness of tapes and Bindings
SATRA TM167	Apr 01	Colour fastness to rubbing – crockmeter test
SATRA TM180	Apr 95	Measurement of the strength of stitched seams in upper and lining materials
SATRA TM233	Jul 00	Water resistance of seams – cone test
SATRA TM239	Sep 00	Loop wick test

TOE PUFFS AND STIFFENERS

SATRA TM1	Nov 04	Thickness of leather and insole materials
SATRA TM83	Sep 09	Measurement of the area shape retention and collapsing load of formed toe puff and stiffener materials
SATRA TM108	Sep 92	Strength of top-piece attachment
SATRA TM168	Dec 92	Dimensional stability of footwear foreparts to warm humid conditions
SATRA TM176	Oct 96	Collapsing energy - impact pendulum test
SATRA TM186	Jan 01	Shape retention properties of toe caps of finished footwear

WHOLE SHOE

SATRA TM77	Apr 92	Flexing machine - water penetration test
SATRA TM81	Apr 92	Trough - water penetration test
SATRA TM92	May 92	Resistance of footwear to flexing
SATRA TM104	Dec 96	Fatigue resistance of whole shoe backparts
SATRA TM113	Dec 96	Measurement of the strength of attachment of heels to footwear and the backpart rigidity of such footwear
SATRA TM115	Aug 00	Torsion strength of the top piece attachment
SATRA TM117	Dec 92	Attachment strength of decorative bows
SATRA TM118	Aug 92	Strength of sandal toe posts
SATRA TM120	Jul 01	Strength of attachment of straps and nailed or stapled uppers
SATRA TM143	Feb 95	Breaking force and extension at break of whole shoe top-lines
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM147	Jun 92	Resistance to stretching and flexing
SATRA TM158	Apr 92	Washability of footwear
SATRA TM168	Dec 92	Dimensional stability of footwear foreparts to warm humid conditions
SATRA TM183	Nov 01	Whole shoe cushion assessment test
SATRA TM186	Jan 01	Shape retention properties of toe caps of finished footwear
SATRA TM190	Apr 02	SATRA ground insulation index
SATRA TM194	Jan 04	Longitudinal stiffness of footwear
SATRA TM225	Aug 98	Burning behaviour of slippers
SATRA TM230	May 02	Dynamic water penetration test
SATRA TM256	Feb 02	Torsional stiffness of footwear
SATRA TM376	Feb 09	Advanced moisture management test
SATRA TM404	Jul 92	Rapid sole adhesion test - for complete footwear
SATRA TM409	May 93	Heat resistance /heat ageing of sole bonds in complete footwear
SATRA TM411	May 92	Peel strength of footwear sole bonds

TEST METHOD LIST - BY TYPE OF TEST

ABRASION

SATRA TM14	Nov 04	Resistance to scuffing by mild circular abrasion
SATRA TM31(2005)	Apr 03	Abrasion resistance - Martindale method
SATRA TM38	May 99	Impact scuff test for upper leather
SATRA TM84	Mar 97	Abrasion resistance - reciprocating method
SATRA TM93	Feb 93	Abrasion between shoe laces and eyelets
SATRA TM95	Jul 96	Abrasion and snagging resistance - drum method
SATRA TM140	Jul 96	Scuff resistance - chisel method
SATRA TM154	Sep 92	Shoe lace to shoe lace and shoe lace to lace carrier abrasion
SATRA TM163	Oct 96	Abrasion resistance - Taber method
SATRA TM174	Mar 94	Abrasion resistance - rotating drum method
SATRA TM177	Apr 95	Resistance to scuffing by mild to-and-fro abrasion
SATRA TM193	Jun 04	Abrasion resistance of leather
SATRA TM212	May 02	Resistance to pilling of apparel fabrics
SATRA TM222	Dec 00	Snagging test – mace method
SATRA TM228	Feb 02	Abrasion resistance of trims – drum method
SATRA TM250	Apr 02	Scuff resistance of solings
SATRA TM362	Sep 08	Abrasion resistance of soles - biomechanical method

ADHESION

SATRA TM264	Apr 02	Spotting tack and green strength of furniture foam bonding adhesives
SATRA TM281	Sep 02	Peel strength of bottom constructions in complete footwear
SATRA TM401	Jul 00	Peel strength of adhesive bonds
SATRA TM402	Apr 97	Preparation of bonded test assemblies for adhesion tests
SATRA TM402	Sep 05	Supplement No. 1
SATRA TM403	Jan 96	Resistance to heat of adhesive bonds - constant peel force method (creep test)
SATRA TM404	Jul 92	Rapid sole adhesion test - for complete footwear
SATRA TM405	Dec 97	Determination of shear and peel strength of insole ribs
SATRA TM406	Feb 99	Lacquer adhesion - cross hatch test
SATRA TM408	Oct 93	Adhesion of finish - deadweight method
SATRA TM409	May 93	Heat resistance/heat ageing of sole bonds in complete footwear
SATRA TM410	Apr 95	Adhesion strength of a coating to its base
SATRA TM411	May 92	Peel strength of footwear sole bonds
SATRA TM414	May 92	Preparation of hot melt bonded assemblies for peel tests
SATRA TM416	Oct 96	Determination of film or coating adhesion to base material
SATRA TM417	Apr 97	Cleavage test for heel lift lamination strength
SATRA TM419	May 95	Spotting tack of adhesive bonds
SATRA TM420	Jul 94	Resistance to heat of pressure sensitive adhesive bonds – constant shearing force method
SATRA TM422	Dec 94	Immediate (“green”) peel strength of adhesive bonds
SATRA TM425	Feb 99	Peel strength of laminated fabrics
SATRA TM426	Mar 00	Spotting tack – instrumental method

COMPOSITION

SATRA TM277	Jan 04	Determination of organotin compounds
SATRA TM303	Apr 95	Vegetable tans content - qualitative test
SATRA TM307	Jun 99	Water soluble chloride content of leather
SATRA TM313	Jan 98	Organic dressing and salts content of fabrics
SATRA TM319	Jan 01	Determination of para-nitrophenol in leather by infra-red analysis
SATRA TM323	Jul 98	Qualitative test for acidity in leather
SATRA TM327	Jul 01	The K value of PVC soling compounds

SATRA TM329	Sep 95	Water soluble matter content of leather
SATRA TM331	Jun 99	The estimation of soluble chrome in leather
SATRA TM332	Sep 92	Chemical analysis of polyurethanes
SATRA TM336	Apr 97	Binder content and type in cellulose insole boards
SATRA TM340	Aug 92	Determination of acetone soluble matter and copper
SATRA TM342	Jun 95	Determination of pentachlorophenol
SATRA TM345	Aug 96	Solvent soluble matter in polymeric materials
SATRA TM346	Jun 94	Fat and free fatty acids content of leather
SATRA TM347	Jan 96	Volatile matter content
SATRA TM348	Jan 96	Ash and chromic oxide content of leather
SATRA TM349	Jan 96	Acidity - pH value and pH difference figure - of an aqueous extract
SATRA TM350	Jun 95	Analysis of solvent vapour adsorption badges and tubes
SATRA TM352	Jun 99	Distinguishing between types of polyurethane
SATRA TM353	Mar 99	Ash content of polymeric materials
SATRA TM354	Jan 98	Qualitative test for the presence of nickel
SATRA TM358	May 99	Extractable chromium in leather
SATRA TM359	Jul 00	Nitrocellulose finishes – qualitative test
SATRA TM388	Jun 08	The quantitative determination of Octylphenol (OP) Octylphenol ethoxylate (OPE) Nonylphenol (NP) and Nonylphenol ethoxylate (NPE)
SATRA TM428	Dec 09	The quantitative determination of total metals using microwave digestion followed by inductively coupled plasma optical emission spectrometry (ICP-OES)

DISCOLOURATION

SATRA TM8	Jun 04	Colour fastness to circular rubbing
SATRA TM158	Apr 92	Washability of footwear
SATRA TM160	Jul 92	Colour fastness to light from a xenon arc
SATRA TM167	Apr 01	Colour fastness to rubbing - crockmeter test
SATRA TM173	May 95	Colour fastness to rubbing - reciprocating method
SATRA TM185	May 95	Colour fastness to water spotting of leathers, textiles and coated fabrics
SATRA TM199	Sep 99	Water spotting - shoe care products
SATRA TM200	Sep 99	Resistance to mud staining - shoe care products
SATRA TM201	Oct 99	Water and oil repellency - shoe care products
SATRA TM204	Jul 00	Durability of garments to washing
SATRA TM207	May 02	Colour fastness to domestic and commercial laundering
SATRA TM208	May 02	Colour fastness to hot pressing
SATRA TM216	Apr 03	Shower resistance
SATRA TM217	Jun 99	Resistance to surface wetting (spray rating)
SATRA TM223	Oct 00	Floor marking by solings or top pieces
SATRA TM229	Apr 02	Resistance of finished insoles to circular rubbing
SATRA TM255	Mar 02	Durability of garments and fabrics to wet cleaning
SATRA TM260	Sep 09	Phenolic (elusive) yellowing of textiles
SATRA TM304	Mar 98	Qualitative tests for soluble colour in upper and lining materials
SATRA TM305	Mar 98	Wick test
SATRA TM335	Dec 94	Colour fastness to water and perspiration
SATRA TM338	Dec 92	Salzman test - detection of contamination by oxides of nitrogen
SATRA TM339	Jul 92	Dabco discolouration test - contamination by amines
SATRA TM341	Nov 92	Oxides of nitrogen discolouration test
SATRA TM343	Nov 92	Contact storage test for discolouration
SATRA TM355	Feb 99	Colour fastness to dry cleaning
SATRA TM356	Feb 99	Colour fastness of textiles to chlorinated water (swimming-pool water)
SATRA TM357	Jan 04	Colour fastness to sodium perborate
SATRA TM361	Jan 10	Bloom formation of polymeric materials (Accelerated ageing test)

FATIGUE

SATRA TM21	Jul 01	Fatigue test for shoe heels
SATRA TM50	Dec 92	Resistance of slide fasteners to repeated opening and closing
SATRA TM87	Jan 98	Fatigue test for rigid sole units and shoe bottoms
SATRA TM97	Feb 99	Fatigue test for steel shanks
SATRA TM103	Aug 92	Resistance of elastics to repeated extension
SATRA TM104	Dec 96	Fatigue resistance of whole shoe backparts
SATRA TM112	Apr 95	Fatigue resistance of insole backparts and backpart components
SATRA TM126	Jul 00	Fatigue resistance of buckled fastenings
SATRA TM156	Jan 02	Resistance of heel assemblies to repeated compression
SATRA TM169	Dec 92	Fatigue resistance of trim fastenings
SATRA TM247	Dec 98	Resistance of handles to repeated lifting
SATRA TM248	Dec 98	Performance of wheel systems – rolling road
SATRA TM257	Sep 09	Fatigue resistance of pedestal-chair clutch-assemblies

FLEXING

SATRA TM3	Mar 99	Flexing index
SATRA TM4	Mar 93	Change in flexing index due to exposure to heat
SATRA TM25	May 92	Vamp flex test - resistance to creasing and cracking
SATRA TM48	Aug 96	Determination of grain crack index for sole leathers
SATRA TM55	Mar 99	Flexing resistance of upper materials – Bally flexometer
SATRA TM60	Jul 92	Ross flex test - resistance to cut growth on flexing
SATRA TM92	May 92	Resistance of footwear to flexing
SATRA TM133	Mar 93	Resistance to crack initiation and growth - belt flex method
SATRA TM147	Jun 92	Resistance to stretching and flexing
SATRA TM161	Nov 04	Bennewart flex test - resistance to cut growth on flexing
SATRA TM164	Jan 96	Universal fatigue flexing
SATRA TM273	Nov 07	Schildknecht flex test – resistance to creasing and cracking

FOOT AND LAST MEASUREMENT

SATRA TM251	Jan 04	Measurement of lasts for women's medium range fashion footwear
SATRA TM252	Feb 98	Method of measurement of lasts for men's closed toe footwear

GENERAL AND PHYSICAL PROPERTIES (OTHER THAN STRENGTH)

SATRA TM1	Nov 04	Thickness of leather and insole materials
SATRA TM10	Oct 96	Longitudinal stiffness - three point bending test
SATRA TM12	Mar 93	Density of leather and insole materials
SATRA TM17	Apr 97	Shrinkage temperature of leather
SATRA TM18	Aug 95	Shape retention - dome plastimeter method
SATRA TM19	Aug 01	Dimensional measurements of plastic heels
SATRA TM24	Apr 92	Lastometer ball burst test
SATRA TM27	Nov 04	Thickness of non-leather flexible sheet materials
SATRA TM28	Jul 94	Mass per unit area
SATRA TM35	Jul 94	Static friction
SATRA TM36	May 99	Break/pipiness
SATRA TM40	Mar 99	Moulded-on rubber soles - state of cure test
SATRA TM44	May 94	Liability to wrinkle
SATRA TM64	Jan 96	Compression set - constant stress method
SATRA TM68	Nov 92	Density of cellular materials
SATRA TM72	May 94	Linear density
SATRA TM73	Jul 00	Twists per unit length of threads
SATRA TM102	Jun 99	Measurement of the limit of useful extension of elastics
SATRA TM105	Feb 95	Resistance to surface peeling due to scraping when hot

SATRA TM111	Jul 00	Tendency to wrinkle of polyurethane coated fabrics
SATRA TM116	Aug 00	Hot stress cracking of patent leather finishes - Zwik method
SATRA TM121	Mar 98	Shrinkage of insole materials on repeated wetting and drying
SATRA TM125	Sep 92	Hardness - Rockwell 'C' method
SATRA TM129	Sep 97	Determination of the cold crack temperature of leather
SATRA TM134(2010)	Oct 98	Density of materials by volume displacement
SATRA TM136	Oct 96	Thickness / effective thickness of soling materials and sole units
SATRA TM138	Jul 01	Density of complete sole units
SATRA TM142	May 92	Falling mass shock absorption test
SATRA TM144	Dec 07	Friction (slip resistance) of footwear and floorings
SATRA TM146	Mar 96	Thermal conductivity
SATRA TM152	Sep 92	Print through and pressure marking
SATRA TM155	Mar 99	Measurement of compressibility of composite soles
SATRA TM159	Feb 02	Cushioning properties
SATRA TM183	Nov 01	Whole shoe cushion assessment test
SATRA TM184	Jul 00	Friction of insoles
SATRA TM186	Jan 01	Shape retention properties of toe caps of finished footwear
SATRA TM187	Nov 96	Stretch recovery properties - constant force ball test
SATRA TM190	Apr 02	SATRA ground insulation index
SATRA TM194	Jan 04	Longitudinal stiffness of footwear
SATRA TM195	Jan 04	Knot slippage test
SATRA TM197	Sep 02	Shear properties of sheet materials
SATRA TM202	Feb 99	Slip resistance of floorings - pendulum method
SATRA TM205	Feb 99	Hardness of rubber and plastics - durometer method
SATRA TM206	Feb 99	Hardness of rubber and plastics - IRHD method
SATRA TM209	May 02	Dimensional stability to washing
SATRA TM210	Jul 02	Dimensional stability to dry cleaning
SATRA TM211	May 02	Dimensional stability to steam
SATRA TM214	May 02	Crease recovery of folded fabrics
SATRA TM215	Jun 01	Transparency of swimwear
SATRA TM227	Aug 00	Assessment of fibre shedding or pile loss
SATRA TM231	Jul 00	Glove friction force
SATRA TM235	Jul 01	Resistance to repeated wetting and drying
SATRA TM238	Dec 04	Shrinkage of foam materials
SATRA TM240	Sep 01	Electrical resistance of footwear components
SATRA TM256	Feb 02	Torsional stiffness of footwear
SATRA TM271	Oct 08	Determination of blocking resistance of coated materials
SATRA TM279	Feb 02	Accelerated conditioning procedure for leather

HEALTH & SAFETY

SATRA TM337(2009)	May 92	Concentration of airborne dust and rubber fume
SATRA TM350	Jun 95	Analysis of solvent vapour adsorption badges and tubes

PHYSICAL AND CHEMICAL DETERIORATION INCLUDING FLAMMABILITY

SATRA TM49	Apr 95	Resistance to damage due to contact with a hot surface
SATRA TM63	Sep 09	Oil swelling test for sole materials
SATRA TM70	Jul 01	Heat shrinkage of cellular solings
SATRA TM98	Jun 92	Dimensional stability with changes in moisture content
SATRA TM157	Feb 99	Determining the flammability risks with polyurethane solings
SATRA TM168	Dec 92	Dimensional stability of footwear foreparts to warm humid conditions
SATRA TM191	Nov 96	Resistance of PVC soles to attack by oils, fats, or dry powders
SATRA TM225	Aug 98	Burning behaviour of slippers
SATRA TM234	Dec 00	Relaxation shrinkage and hygral expansion of fabrics
SATRA TM298	Mar 03	Determination of TCMTB (2-Thiocyanomethylthio) – Benzothiazole) content
SATRA TM309	Apr 95	Soil burial deterioration
SATRA TM310	Sep 92	Atmospheric sulphide tarnishing and salt water corrosion

SATRA TM324	Mar 99	Thermal stability of PVC - Congo red test
SATRA TM325	Jun 99	Leaching test for plasticised PVC compounds
SATRA TM326	Jun 95	Plasticiser volatility - activated carbon method
SATRA TM328	May 92	Hydrolysis of polyurethane based sheet materials
SATRA TM344	Apr 95	Hydrolysis of polyurethane solings and polyurethane coated leathers
SATRA TM351	Dec 96	Bottle incubation test

STRENGTH

SATRA TM2	May 95	Tensile properties of insole materials
SATRA TM5	May 00	Stitch-tear strength
SATRA TM11	Jan 93	Pin holding strength of insole materials
SATRA TM20	Aug 00	Lateral impact test for shoe heels
SATRA TM29	Nov 92	Breaking strength and extension at break
SATRA TM30	Sep 95	Tear strength - trouser leg method
SATRA TM33	Nov 92	Strength perpendicular to needle perforations
SATRA TM37	May 99	Nail penetration – shoe bottoms and protective midsoles
SATRA TM43	Jun 00	Tensile strength and extension at break of leather
SATRA TM45	Mar 98	Stitchability of upper threads
SATRA TM51	Aug 93	Lateral strength of slide fasteners
SATRA TM52	Jan 02	Strength of slide fastener pullers
SATRA TM53	Sep 92	Attachment strength of slide fastener end stops
SATRA TM58	May 99	Stiffness of steel shanks
SATRA TM59	Sep 00	Longitudinal stiffness of insole backparts
SATRA TM65	May 92	Split tear strength
SATRA TM74	Jun 94	Breaking force, extension at break, strength factor and tightness of threads
SATRA TM80	Apr 92	Transverse tensile strength of sheet materials
SATRA TM83	Sep 09	Measurement of the area shape retention and collapsing load of formed toe puff and stiffener materials
SATRA TM85	Jul 94	Resistance of slide fasteners to damage during closure under a lateral force
SATRA TM86	Jul 01	Impact test for rigid units and shoe bottoms
SATRA TM88	Aug 01	Measurement of the torsional stiffness of insole backparts
SATRA TM94	Jun 93	Breaking force and extension at break of shoe laces
SATRA TM96	Sep 95	Security of heel pins
SATRA TM101	May 93	Surface peel strength of insole materials
SATRA TM106	Dec 94	Breaking force, extension at break and tightness of tapes and bindings
SATRA TM108	Sep 92	Strength of top-piece attachment
SATRA TM113	Dec 96	Measurement of the strength of attachment of heels to footwear and the backpart rigidity of such footwear
SATRA TM115	Aug 00	Torsion strength of the top piece attachment
SATRA TM117	Dec 92	Attachment strength of decorative bows
SATRA TM118	Aug 92	Strength of sandal toe posts
SATRA TM120	Jul 01	Strength of attachment of straps and nailed or stapled uppers
SATRA TM123	Jul 92	Closure strength of touch and close fasteners
SATRA TM130	Jan 96	Breakage of plastic lasts in bending test
SATRA TM137	Jun 95	Tensile properties of plastics and rubbers
SATRA TM141	Jul 94	Breaking force of buckles - three point bending test
SATRA TM143	Feb 95	Breaking force and extension at break of whole shoe top-lines
SATRA TM148	Jan 97	Resistance of finish films on upper leather to peeling and delamination
SATRA TM149	May 99	Strength of eyelet facings and other laced fastenings
SATRA TM150	Feb 99	Attachment strength of eyelets
SATRA TM151	May 99	Strength of fastened buckles
SATRA TM162	Jun 92	Tear strength - Baumann method
SATRA TM165	Nov 92	Tab strength
SATRA TM166	Nov 92	Slide fastener burst strength
SATRA TM170	Dec 92	Burst strength and distension - diaphragm method
SATRA TM175	Jun 95	Attachment strength of shoe lace tags
SATRA TM176	Oct 96	Collapsing energy - impact pendulum test

SATRA TM179	Jan 96	Tear strength - wing rip method
SATRA TM180	Apr 95	Measurement of the strength of stitched seams in upper and lining materials
SATRA TM181	Aug 96	Strength of buckle and strap attachment
SATRA TM203	Jan 98	Tightness of screw-in studs
SATRA TM213	Oct 03	Tear strength – Elmendorf method
SATRA TM218	Jun 99	Tear strength of rubbers and plastics - trouser method
SATRA TM226	Feb 99	Slider locking strength of slide fasteners
SATRA TM236	Jul 00	Breaking strength and tip deflection of needles
SATRA TM237	Jul 00	Needle penetration force
SATRA TM241	Dec 98	Resistance to static loading
SATRA TM242	Sep 08	Resistance to dropping
SATRA TM243	Sep 08	Resistance of handles to snatching
SATRA TM244	Dec 98	Tensile strength of attachment fittings
SATRA TM245	Dec 98	Resistance of trolley handles to compression
SATRA TM246	Dec 98	Resistance of trolley handles to bending
SATRA TM249	Dec 98	Resistance to puncturing
SATRA TM269	Sep 09	Seam slippage of woven fabrics
SATRA TM275	May 02	Security of attachment of stones or inlays
SATRA TM276	May 02	Tensile strength of looped jewellery
SATRA TM302	June 03	Star-burst strength of leather

WATER RESISTANCE

SATRA TM9	Nov 92	Surface water absorption and repellency
SATRA TM34 (2009)	Mar 93	Resistance to water penetration – Maeser test
SATRA TM41	May 99	Dynamic water penetration test for sole leather
SATRA TM76	Jul 01	Water absorption of cellular solings by the vacuum method
SATRA TM77	Apr 92	Flexing machine - water penetration test
SATRA TM81	Apr 92	Trough - water penetration test
SATRA TM171	May 95	Resistance to water penetration - penetrometer test
SATRA TM198	Sep 99	Evaluation of surface water repellency - shoe care products
SATRA TM217	Jun 99	Resistance to surface wetting (spray rating)
SATRA TM220	Aug 00	Dynamic water penetration test for leather – Bally permeometer method
SATRA TM230	May 02	Dynamic water penetration test
SATRA TM233	Jul 00	Water resistance of seams – cone test
SATRA TM259	Dec 07	Determination of resistance to water penetration – hydrostatic pressure test

WATER TRANSMISSION

SATRA TM6	Mar 93	Water absorption and desorption - total immersion method
SATRA TM9	Nov 92	Surface water absorption and repellency
SATRA TM23	Nov 04	The SATRA/PATRA water vapour permeability test for shoe upper materials
SATRA TM47	Jun 02	Water vapour permeability and absorption
SATRA TM172	May 93	Water vapour permeability
SATRA TM178	Jun 01	Water vapour absorption
SATRA TM198	Sep 99	Evaluation of surface water repellency - shoe care products
SATRA TM219	Aug 00	Water absorption of leather – Kubelka method
SATRA TM239	Sep 00	Loop wick test
SATRA TM274	Feb 02	Water vapour permeability of clothing membrane materials
SATRA TM278	Sep 02	Moisture transfer test for insoles
SATRA TM305	Mar 98	Wick test
SATRA TM376	Feb 09	Advanced moisture management test