Laboratory	**ITS Labtest Bangladesh Ltd., Phoenix Tower, 2nd and 3rd Floor, 407, Tejgaon Industrial Area, Dhaka, Bangladesh**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Mechanical Testing**	**Issue Date**	**20.02.2015**
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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	**TEXTILE MATERIALS**			
1.	**Yarn**	Yarn count skein form	ASTM D 1907: 2007/ 1907M : 2012	5 tex to 100 tex
		Single thread strength & Elongation	BS EN ISO 2062: 2009 EN ISO 2062: 2009 ISO 2062: 2009 ASTM D 2256/ D 2256M: 2010 CAN/CGSB-4.2 No. 9.4- M91 (R-2013)	(5 to 90) N 0.5 kg to 9 kg 1 lb to 18 lb 1 % to 100 %
		Twist of Yarn	BS EN ISO 2061: 2010 ISO 2061: 2010 EN ISO 2061: 2010 ISO 7211-4: 1984 ASTM D 1423: 2002 (2008) CAN/CGSB-4.2 No 8.1 M89 & 8.2 M89: 2004	80 tpm to 4000 tpm (2 to 100) tpi
2.	**Fabric**	Linear density of yarn removed from the fabric	BS ISO 7211-5: 1984 ISO 7211-5: 1984 JIS L 1096: 2010	5 tex to 100 tex (6 to 120) Ne
3.	**Textile & Polymer Products**	Tensile Strength & Elongation-Strip Method	BS EN ISO 13934 -1: 2013 EN ISO 13934 -1: 2013 ISO 13934 -1: 2013 ASTM D 5035: 2011 AS 2001.2.3-1: 2001 CAN/CGSB: 4.2 No. 9.1 M-90 (R-2013)	5 N to 4.5 kN 1 % to 100 %

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	Textile & Polymer Products	Tensile Strength & Elongation- Grab Method	BS EN ISO 13934- 2: 2014 EN ISO 13934- 2: 2014 ISO 13934- 2: 2014 ASTM D 5034 : 2009 (2013) AS 2001.2.3.2: 2001 CAN/CGSB: 4.2 No.9.2 M-90 (2013) JIS L 1096: 2010	5 N to 4.5 kN 1% to 100 %
		Coated Adhesion	ISO 2411: 2000 ASTM D 2724: 2007 (R-2011)	5 N to 4.5 kN
4.	**Textile, Garment & Accessories Yarn**	Tear Strength- Elmendorf	BS EN ISO 13937-1: 2000 EN ISO 13937-1: 2000 ISO 13937-1: 2000 ISO 9290: 1990 ASTM D 1424: 2009 (2013) AS 2001.2.8: 2001 CAN/CGSB: 4.2 No 12.3: 2005	1.6 N to 115 N (0.35 to 25.3) lbs
		Tear Strength- Tensile	BS EN ISO 13937-2: 2000 EN ISO 13937-2 : 2000 ISO 13937-2 : 2000 BS EN ISO 13937-3: 2007 EN ISO 13937-3 : 2000 ISO 13937-3 : 2000 ASTM D 2261 : 2013 JIS L 1096: 2010	5 N to 4.5 kN
5.	**Textile, Garment & Accessories**	Bursting Strength- Hydraulic	BS EN ISO 13938 –1: 1999 [E] ISO 13938-1: 1999 ASTM D3786 / D 3786 M: 2013 AS 2001.2.4: 1990 Method A CAN/CGSB-4.2 No.11.1: 1994 (2013) JIS L 1096: 2010	70 kPa to 1240 kPa (10 to 180) psi

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	Textile, Garment & Accessories	Bursting Strength- Pneumatic	BS EN ISO 13938 –2: 1999 EN ISO 13938 –2: 1999 ISO 13938 –2: 1999 ASTM D3786/ D 3786 M: 2013	70 kPa to 1240 kPa (10 to 180) psi
		Bursting Strength- Ball Bursting	JIS L 1096 : 2010	5 N to 4.5 kN
		Seam Properties- (Seam Strength)	BS EN ISO 13935-1: 2014 BS EN ISO 13935-2: 2014 EN ISO 13935-2: 2014 ISO 13935-2: 2014 ASTM D 1683/ D 1683M: 2011a	5 N to 2.0 kN (0.5 to 200) kg
		Seam Properties- (Seam Slippage)	BS EN ISO 13936-1: 2004 EN ISO 13936-1: 2004 ISO 13936-1: 2004 BS EN ISO 13936-2: 2004 EN ISO 13936-2: 2004 ISO 13936-2: 2004 ASTM D 434: 1995 ASTM D 1683/ D 1683M: 2011a	Upto 10 mm 5 N to 2.0 kN
		Threads per Unit Length (Woven fabric construction)	BS EN 1049 (Part 2): 1994 ISO 7211-2: 1993 ASTM D 3775: 2012 EN 1049-2: 1994 AS 2001.2.5: 1991 JIS L 1096: 2010	(10 to 80) per cm (25 to 200) per inch

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	Textile, Garment & Accessories	Threads per Unit Length (Knit fabric construction)	BS 5441 : 1988 (2007) Section 2 (2012) ASTM D 3887: 1996 (2008) Section 12 AS 2001.2.6: 2001 CAN/CGSB: 4.2 No. 7 M-88 (2001) JIS L 1096: 2010	(10 to 80) per cm (25 to 200) per inch
		Fabric Width	ISO 22198: 2006 BS EN 1773: 1997 EN 1773: 1996 ASTM D 3774: 1996 (2012) ASTM D 3887: 1996 (2008) Section 10 CAN/CGSB: 4.2 No 4.1 M-87, Amd-1 : 2000 JIS L 1096: 2010	1 cm to 300 cm
		Fabric Mass Per Unit Area	BS 2471: 2005 ISO 3801: 1977 Method 5 BS EN 12127 : 1998 EN 12127: 1998 DIN EN 12127: 1997 (2012) ASTM D 3776/D 3776 M: 2009 a (2013) Option C ASTM D 3887 :1996 (2008) Section 9 AS 2001.2.13: 1987 CAN/CGSB: 4.2 No.5.1 M-90 (R-2013) JIS L 1096: 2010	20 gsm to 700 gsm
		Pilling Resistance- ICI Pilling	BS EN ISO 12945-1: 2001 EN ISO 12945-1: 2001 ISO 12945-1: 2000 (E)	Grade 1 to 5

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	Textile, Garment & Accessories	Elastomeric Pant Pilling	ASTM D 3514/ D 3514 M-10 (2014)	Grade 1 to 5
		Pilling Resistance- Random Tumble pilling	CAN/CGSB : 4.2 No 51.2 M-87 (1997) ASTM D: 3512/ D 3512 M-10: 2014	Grade 1 to 5
		Pilling Resistance- Modified Martindale pilling	BS EN ISO 12945-2: 2000 BS 5811: 1986 (1997) ASTM D 4970/ D 4970 M-10 E ISO 12945-2: 2000 (E)	Grade 1 to 5
		Abrasion Resistance- Martindale	BS EN ISO 12947-1/2/3/4: 1998 ISO 12947-1/2/3/4: 1998 (E)/ Cor 1 : 2002 ASTM D 4966: 2012 AS 2001.2.25: 1990 JIS L 1096: 2010	(1 to 100000) Cycles Grade 1 to 5
		Abrasion Resistance- Taber	JIS L 1096: 2010 ASTM D 3884: 2009 ASTM D 4685: 2007 (2011)	Grade 1 to 5
		Abrasion Resistance - Universal Wear	ASTM D 3885: 07 a (2011) ASTM D 3886: 1999 (2011)	(1to 100000) Cycles Grade 1 to 5
		Stretch & Recovery or Tension & Elongation	BS 4952: 1992 (2002) BS EN 14704-1: 2005 EN 14704-1: 2005 BS 4294 : 1968 ASTM D 2594 : 2004 (2012) ASTM D 4964 : 96 (2012) ASTM D 3107: 2007 (2011) JIS L 1096: 2010	1 % to 200 %

S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Textile, Garment & Accessories	Resistance To Unsnaping of Snap Fasteners	ASTM D 4846: 96 (2011)	1 N to 90 N
		Water Repellency: Spray Test	ISO 4920: 1981 (E) (2012) BS EN ISO 4920: 2012 EN ISO 4920: 2012 AATCC 22 : 2010 AS 2001.2.16: 1987 CAN/CGSB-4.2 No 26.2: 1994 JIS L 1092: 2009 (R-2013)	ISO 1 to 5 (0 to 100)
		Water Resistance: Rain Test	AATCC 35: 2013	0.1 g to 50 g
		Sharp Points under a force of 4.45 N (1Pound)	ASTM F 963: 2011 Section : 4.9 16 CFR 1500.48 BS EN 71 (Part 1): 2011 Section 8.12	Qualitative
		Sharp Edges under a force of upto 8.90 N (2 Pound)	ASTM F 963 : 2011 Section : 4.7 16 CFR 1500.49 BS EN 71 (Part 1) : 2011 Section 8.11	Qualitative
		Small Parts Tension Test up to 294 N (upto 30 kg or 66 Pounds)	ASTM F 963: 2011 Section : 8.9 16 CFR 1500.51-53 BS EN 71 (Part 1): 2011 Section 8.4	Qualitative
		Small Parts Torque Test upto 15.0 kg-cm (upto 13.0 inch Pound)	ASTM F 963: 2011 Section : 8.8 16 CFR 1500.51-53 BS EN 71 (Part 1): 2011 Section 8.3	Qualitative
		Removal force of attached components for children's clothing	BS 7907: 2007 (Annex B & C)	5 N to 4.5 kN

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	Textile, Garment & Accessories	Small Parts- Choking Hazard Test (Small part cylinder of 31.7 mm inner diameter)	ASTM F 963: 2011 Section: 4.6 16 CFR 1501 BS EN 71 (Part 1): 2011+A 3: 2014 Section 8.2	Qualitative
6.	**Textile & Garment**	CPSC Drawstrings Guideline on Children's upper outer wear /clothing a) Presence of drawstrings at Hood & Neck area. b) Presence of drawstrings at Waist & Bottom area or lower of garments. c) If Present: i) Is the length of drawstring outside drawstring channel more than 75 mm when the garment is expanded to its fullest width? ii) Presence of Toggles, Knots or any other decorative attachments at the free end of drawstring. iii) Is the drawstring bar tacked, if it is one continuous string.	BS EN 14682: 2007 NF EN 14682: 2008 ASTM F 1816: 1997 (2009)	Qualitative

S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Textile & Garment	Dimensional stability to washing	BS EN ISO 6330 : 2012 ISO 6330 : 2000/Amd -1(2012) BS EN ISO 5077: 2008 EN ISO 5077: 2008 ISO 5077: 2007 BS EN ISO 3759: 2011 ISO 3759: 2011 AATCC 135: 2012 AATCC 150: 2012 AS 2001.5.4: 2005 CAN/CGSB : 4.2 No 58: 2004	-50 % to 50 %
		Wash and Wear Performance	ISO 7768: 2009 ISO 7770: 2009 ISO 7769: 2009 AATCC 124 : 2011 AATCC 88B: 2011 AATCC 88C: 2011 AATCC 143: 2011	Grade: SA-1 to SA-5 Grade: SS-1 to SS-5 Grade: CR-1 to CR-5 Qualitative
		Spirality / Torque / Skewness	ISO 16322-2 & 3: 2005 AATCC 179: 2012	-50 % to 50 %
		Soil Release: Oil Stain Release Method	AATCC 130: 2010	Stain Release: Grade 1 to 5
		Distortion in bowed and skewed fabrics	BS 2819: 1990 ASTM D 3882: 2012 JIS L 1096: 2010	(0 to 50) %
		Fabric stiffness by circular bend procedure	ASTM D 4032: 08 (2012)	2.5 kg to 25 kg 5 lb to 50 lb
		Pocket Reinforcement	ASTM D 7506/ D 7506M: 2012	5 N to 4.5 kN 1 lb to 1012 lb

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	Textile & Garment	Dimensional Stability to commercial Dry-Clean	AATCC 158: 2011 ISO 3175 -1/2: 1998 ISO 3759: 2011	- 25 % to 25 %
		Dimensional Stability to Steaming	BS 4323: 1979 ISO 3005: 1978	- 20 % to 20 %
		Water Penetration (Hydrostatic Head test)	ISO 811: 1981 BS EN 20811:1992 AATCC 127 Option -2: 2013	10 mbar to 2695 mbar
7.	**Zipper**	Zipper Test	BS 3084: 2012 DIN 3419-1: 1998 ASTM D 2061: 2007 (2013) ASTM D 2062: 03 (2014) AS 2332: 2003	5 N to 2.0 kN
8.	**Button**	Impact Resistance	ASTM D 5171: 2009 BS 4162: 1983 (2013)	Qualitative
II.	**PLASTICS, RUBBER & LEATHER**			
1.	**Leather/ Footwear**	Tensile strength and extension at break of leather	SATRA TM 43: 2000 ISO 3376: 2011	5 N to 4.5 kN 1 % to 100 %
		Tensile Properties of Plastic and rubbers	SATRA TM 137: 1995	
		Breaking force, extension at breaking of shoe Lace	SATRA TM 94: 1993	
		Breaking force, extension at break and tightness of Tape and Bindings	SATRA TM 106: 1994	
		Breaking force and extension at break of whole shoe top lines	SATRA TM 143: 1995	
		Breaking force, extension at break, strength factor and tightness of thread	SATRA TM 74: 1994	

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	Leather/ Footwear	Tear strength- Trouser Method	SATRA TM 218: 1999 ISO 4674-1:2003 Method B EN 13571: 2001	5 N to 4.5 kN
		Tear strength- Trouser leg Method	SATRA TM 30: 1995	
		Tear strength-Baumann Method	SATRA TM 162: 1992	
		Single Edge Tear	ISO 3377-I: 2011	
		Double Edge Tear	ISO 3377- II: 2002	
		Strength of Stitched Seams in upper and Lining materials	SATRA TM 180: 1995 BS EN 13572: 2002	5 N to 2.0 kN
		Lastometer Ball Burst Test	SATRA TM 24: 1992	5 N to 4.5 kN
		Peel strength of footwear Sole bond	SATRA TM 411: 1992	0.5 N/mm to 150 N/mm
		Upper sole Adhesion strength	ISO 17708: 2003	
		Sole bond Peeling strength	BS 5131-5.4: 1978	
		Rapid sole Adhesion strength	SATRA TM 404: 1992	5 N to 980 N
		Adhesion of stuck on and moulded footwear	BS 5131: 5.1: 1990	
		Break/Pipiness of Leather	SATRA TM 36: 1999	Qualitative Grade Scale 1 to 8
		Thickness of leather and insole materials	SATRA TM 1: 2013 ISO 2589: 2002 EN ISO 2589: 2002	1 mm to 9 mm

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2.	**Footwear**	Hardness of rubber and plastic Durometer method	SATRA TM 205: 1999 ISO 868: 2003 BS ISO 7619-1: 2010	(10º to 90º) Shore A
		Bennewart Flex Test-Resistance to cut growth on flex testing	SATRA TM 161: 2004	0.1 mm to 25 mm
		Flex Resistance of Outsole	BS EN ISO 17707: 2005	
		Flexing resistance of upper materials- Bally Flexometer	SATRA TM 55: 1999	Qualitative
		Flexometer method	ISO 5402: 2002 BS EN 13512: 2002	
		Abrasion resistance-Martindale method	SATRA TM 31: 2003 (2005) BS EN 13520: 2002 ISO 17704: 2004	Grade 1 to 5
		Abrasion resistance –Rotating drum method	SATRA TM 174: 1994 ISO 4649: 2010	1 mm^3 to 1500 mm^3 Grade 1 to 5
		Abrasion resistance for outsole	BS EN 12770: 2000	
		Attachment Strength of - Eyelet - Shoe lace tags - Decorative trim	 SATRA TM 150: 1999 SATRA TM 175: 1995 SATRA TM 117: 1992	5 N to 4.5 kN
		Strength of attachment of heels to footwear	SATRA TM 113: 1996 BS EN 12785: 2000	
		Strength of Strap / buckle attachment	SATRA TM 181: 1996	
		Strength of Sandal post attachment	SATRA TM 118: 1992	
		Pin holding strength of insole materials	SATRA TM 11: 1993	5 N to 4.5 kN

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