

This order is subject to the attached warranty and liability waiver

Submit Samples to:  
Manufacturing Solutions Center Test Lab  
301 Conover Station SE  
Conover NC 28613

### TEST REQUEST FORM



Jodi Geis, Testing Lab Manager  
Phone: 828-327-7000 Ext.4115  
[jgeis@manufacturingsolutionscenter.org](mailto:jgeis@manufacturingsolutionscenter.org)

Please fill out items in **BLUE** and include a copy of this form in with shipment

**INVOICING INFORMATION:** Visit our website for Frequently Asked Questions - [www.manufacturingsolutionscenter.org](http://www.manufacturingsolutionscenter.org)

Is this the first time you've tested with us? "X" here

**Company Name** \_\_\_\_\_ **Billing Contact** \_\_\_\_\_

**Testing Contact** \_\_\_\_\_ **Billing Phone #** \_\_\_\_\_

**Testing Contact Phone #** \_\_\_\_\_ **Billing Address** \_\_\_\_\_

**PO # if applicable** \_\_\_\_\_ **Billing Address** \_\_\_\_\_

\*\*Please note: Invoice will come from CVCC (Catawba Valley Community College) Please make checks payable to "CVCC".

**TEST RESULT DISTRIBUTION\*:**

<b>Name</b> _____	<b>Email</b> _____	<b>*Test results will ONLY be sent to those emails listed here</b>
<b>Name</b> _____	<b>Email</b> _____	
<b>Name</b> _____	<b>Email</b> _____	
<b>Name</b> _____	<b>Email</b> _____	

**EXPRESS TESTING (IF APPLICABLE)**

"X" for Express  \*If testing permits, some test methods can be performed in 2 business days or less for double the cost.

**Express Testing:** \*Certain Antimicrobial Testing can be performed in 5 business days or less for double the cost.

**RETURN TESTED SAMPLES (IF APPLICABLE)**

"X" for Return samples  **Return Tested Samples** *Please note: Testing methods are destructive to fabrics. Only what is left after testing is complete will be returned.* **A handling fee of \$10.00 will be added to this invoice for all returned samples. Shipping fees apply.**

Customer Will Pick Up within 2 weeks of completion - samples not picked up will be destroyed after 6 months

Add shipping and handling fee to this invoice

I have provided my shipper, account # and zip code below OR I have enclosed my own shipping label

**Carrier & Shipping Speed** \_\_\_\_\_ **Shipping Address if different from billing address** \_\_\_\_\_

**Account #** \_\_\_\_\_

**Billing Account Zip Code** \_\_\_\_\_

**SAMPLE IDENTIFICATION**

**Sample Style Number(s)** \_\_\_\_\_ **Sock or Garment Size (if applicable)** \_\_\_\_\_

**Sample Color(s)** \_\_\_\_\_

**Sample Description(s)** \_\_\_\_\_

**Special Instructions** \_\_\_\_\_

**Fiber Content** \_\_\_\_\_

Not supplying enough samples/yardage will increase testing turnaround time. *Please indicate face & selvage on fabric if applicable*

**SAMPLES REQUIRING HOME LAUNDERING - INSTRUCTIONS**

**WASH:**  Top Load Machine  Delicate Wash  Hand Wash  Front Load Machine

**Temp:**  Cold  Warm  Hot (120°F)  Other \_\_\_\_\_

**Detergent:**  AATCC Powder  Tide Original Powder  Liquid AATCC  Liquid Tide Original

**DRY:**  Tumble  Line/Drip  Lay Flat

**High**  **Medium**  **Low/Delicate**

Date Received \_\_\_\_\_ Test Number \_\_\_\_\_

Date Completed \_\_\_\_\_ Lab Tech Signature \_\_\_\_\_

*Unless otherwise specified, the latest publication of a test method is run. Test methods with older publication dates can be run if requested.*

Test Description	Testing Method	Amount of Fabric /Garments Needed	Price	# of Tests	Total
<b>PPE Testing:</b>					
Water Resistance: Impact Penetration Test	AATCC 42 FABRIC	3 specimens - 7"x13"	\$18.00		
Water Resistance: Impact Penetration Test	AATCC 42 SEAMS-lengthwise	3 specimens - 7"x13"	\$18.00		
Water Resistance: Impact Penetration Test	Customer must provide samples per AQL 4% AATCC 42-ANSI/AAMI PB70:2012	per specimen	\$6.00		

Water Resistance: Hydrostatic Pressure Test	AATCC 127 FABRIC	3 specimens - 8"x8"	\$30.00		
Water Resistance: Hydrostatic Pressure Test	AATCC 127 SEAMS-lengthwise	3 specimens - 8"x8"	\$30.00		
Water Resistance: Hydrostatic Pressure Test Customer must provide samples per AQL 4%	AATCC 127-ANSI/AAMI PB70:2012	per specimen	\$10.00		
Protective Clothing to Penetration of Synthetic Blood	ASTM 1670/F1670M	1/2 yard	\$75.00		
Protective Clothing to Penetration of Synthetic Blood Customer must provide samples per AQL 4%	ASTM 1670/F1670M-ANSI/AAMI PB70:	per specimen	\$25.00		
Break Strength & Elongation of Fabrics - Grab Test <b>Accredited ISO/IEC 17025</b>	ASTM D5034	1 yard	\$30.00		
Tear Strength of Fabrics - Trapezoid Procedure <b>Accredited ISO/IEC 17025</b>	ASTM D5587	1 yard	\$30.00		
Tear Strength of Non-Woven Fabrics-Trapezoid Procedure <b>Accredited ISO/IEC 17025</b>	ASTM D5733	1 yard	\$30.00		
Fabric - Seam Strength	ASTM D 1683	1 yard	\$60.00		
Break Strength - Grab Test of Coated Fabrics	ASTM D751 Sect 12-15; Proc A	1 yard	\$30.00		
Seam Strength - Coated Fabrics	ASTM D751 Sect 71-76	1 yard	\$30.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Desiccant Method at 23°C	ASTM E96 Procd A 24 hr run time	1 gown / 3' x 3'	\$165.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Water Method at 23°C	ASTM E96 Procd B 24 hr run time	1 gown / 3' x 3'	\$165.00		
Abrasion Resistance - Fabric (Martindale Tester): Option 1 = hole in knits or Option 1 = 2 ends break in wovens Up to 25,000 movements	ASTM D4966 Option 1	1/2 yard	\$50.00		
Movements past 25,000 are \$10 per each 5,000 movements		1/2 yard	\$10.00		
Flammability of Wearing Apparel - Test face of fabric <b>Accredited CPSIA / ISO/IEC 17025</b>	16 CFR 1610/ASTM D1230	3 gowns/1 yd	\$90.75		
Flammability of Wearing Apparel - Test face & back of fabric <b>Accredited CPSIA / ISO/IEC 17025</b>	16 CFR 1610/ASTM D1230	3 gowns/1 yd	\$150.75		
Repeated Home Laundering (\$4.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC LP1		\$4.00		
Repeated Home Laundering (\$4.00 per Laundering)-AATCC Liquid Detergent w/o Brightener	AATCC LP1		\$4.00		
Repeated Home Laundering (\$4.00 per Laundering)-Other:	AATCC LP1		\$4.00		
Repeated Industrial Laundering (\$12.00 per Laundering)-AATCC Powder Detergent w/o Brightener	ISO 15797		\$12.00		
Repeated Industrial Laundering (\$12.00 per Laundering)-AATCC Liquid Detergent w/o Brightener	ISO 15797		\$12.00		
<b>Pedestrian Face Mask Testing:</b>					
Air Permeability - US Standard (38 cm <sup>2</sup> sample head; 125 Pa; cfm)	ASTM D737	2 garments/ ½ yard	\$20.00		
<b>Fiber Analysis, Identification &amp; Construction of Fabric &amp; Yarn Cones:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Fiber Content of a Yarn or Fabric in %	AATCC 20 & 20A	1 cone or 1/2 yard	\$35.00		
Fiber Content of a Sock or Pantyhose in %	AATCC 20 & 20A	2 Socks	\$65.00		
Fiber Content of a Sock or Pantyhose in % (high pattern)	AATCC 20 & 20A	2 Socks	\$90.00		
Fiber Content	ASTM D629	1 cone or 1/2 yard	\$65.00		
Fiber Content	CAN/CGSB-4.2 NO. 14-2005	1 cone or 1/2 yard	\$65.00		
Fiber Content/Yarn Count/Construction for Entire Sock (approx. 8-12 yarn counts) (\$65.00+\$90.00)	ASTM D1059 & D2260	2 Socks	\$155.00		
Specialty Fiber Microscopy/Cross Section \$40/hr.	AATCC 20	1 cone	\$40.00		
Yarn Count/Denier Count of Yarn in Fabric - \$11.00 per yarn	ASTM D1059 & D2260	1 yard	\$11.00		
Yarn Number by the Skein Method (120 yard reeling) from Cone of Yarn	ASTM D1907/D1907M	1 cone	\$11.00		
Filament Count per Yarn Identified	ASTM D1059 & D2260	40" of Yarn	\$11.00		
Breaking Load (Strength) of Yarn by the Skein Method (120 yard reeling)	ASTM D1578	1 cone	\$11.00		
Twist in Yarns by Direct Counting or Untwist/Retwist Method (Ply & Single)	ASTM D1423	1 Cone or 1 yard	\$11.00		
Extractable Matter in Textiles: OPU%(Oil Pick Up%)	MSC-107	1 cone	\$11.00		
Single Yarn Strength & Elongation (Statimat) - Single Ply	ASTM D2256	1 cone	\$30.00		
Single Yarn Strength & Elongation (Statimat) - Multi Ply	ASTM D2256	1 cone	\$55.00		
Shrinkage of Yarns in Boiling Water	ASTM D2259	1 cone	\$30.00		
Shrinkage of Yarns in Dry Heat	ASTM D2259	1 cone	\$30.00		
Staple Length - Per Measurement	ASTM D3661 Modified	1 cone	\$25.00		
Tensile Properties of Yarn - Single Strand Method (CRE Method)	ASTM D2256	1 cone	\$11.00		
Coefficient of Friction - Yarn to Solid Material	ASTM D3108	1 cone	\$11.00		
Spinning Type (OE, Ringspun, etc.)	ASTM D3888	1 cone	\$5.50		
Melting Point	ASTM D276	1 cone	\$11.00		
Yarn Evenness/Unevenness Testing	ASTM D1425 Modified	1 cone	\$30.00		
Picks Per Inch - Thread Count	ASTM D3775	1/4 full width	\$18.00		
Determination of Number of Threads Per Unit Length - Woven Fabrics	CAN/CGSB-4.2 No. 6-2013	1/4 full width	\$18.00		
Knit Fabric Count (Courses Per Inch & Wales Per Inch)	ASTM D3887	1	\$18.00		
Wale and Course Count of Weft Knitted Fabrics	ASTM D8007	1	\$18.00		

Knitted Fabric Count - Wales and Courses per Centimetre	CAN/CGSB-4.2 No. 7-M88	1/4 full width	\$18.00		
Needle Count of a Sock	MSC-102	1 Sock	\$12.00		
Course Count of a Sock	MSC-106	1 Sock	\$30.00		
Deconstructing Fabric into yarn form so that yarn testing can be performed			\$40.00		
Defect Analysis/Examination			\$40.00		
<b>Cost of Antimicrobial tests are based on the standard test methods. Any modification, laundering or special request may increase the final cost and turnaround time.</b>					
<b>Untreated controls are not included, they count as an extra test.</b>					
<b>Antimicrobial/Antibacterial Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Antibacterial Finishes <b>Accredited ISO/IEC 17025</b>	AATCC 100	20 grams	\$275.00		
Antibacterial Parallel Streak <b>Accredited ISO/IEC 17025</b>	AATCC 147	20 grams	\$75.00		
Repeated Home Laundering (automated washer)-AATCC Liquid Detergent w/o Brightener	AATCC 150 <i>Automated washer</i>	20 grams	\$6.00		
Antibacterial Finishes: Natick Clarification for Testing for AATCC 100	Natick Spec	20 grams	\$750.00		
Repeated Laundering Procedure (Wash/Dry Cycles in a dedicated washer/dryer pair)	<i>Dedicated washer/dryer pair</i>	20 grams	\$8.00		
Antimicrobial Activity <b>Accredited ISO/IEC 17025</b>	ASTM E2149	20 grams	\$235.00		
Additional Shake Time - Above 1 hour (specify time to shake \$5/hr.) for ASTM E2149		20 grams	\$5.00		
Antibacterial Activity and Efficacy on Textile Products	JIS L 1902:2008	20 grams	\$375.00		
Determination of Antibacterial Activity of Antibacterial Finished Products – Textiles	ISO 20743:2013	20 grams	\$375.00		
Determining the Activity of Incorporated Antimicrobial Agents in Polymeric of Hydrophobic Materials	ASTM E2180	contact for instructions	\$425.00		
Antibacterial Activity Assessment of Textile Materials: Agar Plate Method	AATCC90	20 grams	\$90.00		
Antimicrobial Activity Assessment of New Carpets, Pt I: Qualitative : Single Streak Method	AATCC174, Pt I	10" * 10"	\$75.00		
Antimicrobial Activity Assessment of New Carpets, Pt II: Quantitative	AATCC174, Pt II	10" * 10"	\$375.00		
Quantitative Evaluation of the Antibacterial Properties of Porous Antibacterial Treated Articles	ASTM E3160	20 grams	\$325.00		
Special/Other Antimicrobial					
<b>Upholstery Testing</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Wyzenbeek Abrasion • 15,000 double rubs \$65.00 • 30,000 double rubs \$82.50 • every 5000 double rubs past 30,000 is \$13.20	Back the Samples with Foam? Yes Wire Screen or Cotton Duck? Wire Screen INPUT# of double rubs here: 30,000 # over 30,000 0	ASTM D4157; AHFA JIFS&G Ch. 1 or ASTM D4157 - ACT	1 yard full width \$65.00 \$82.50 X \$13.20 0 \$0.00		
Abrasion Resistance - Martindale Abrasion General Upholstery to 20,000 cycles (movements)	ASTM D4966 - ACT	1/2 yard	\$50.00		
Abrasion Resistance - Martindale Abrasion Heavy Duty to 40,000 cycles (movements)	ASTM D4966 - ACT	1/2 yard	\$50.00		
Pilling Resistance - Brush Pilling Tester	ASTM D3511	1/2 yard	\$35.00		
Pilling Resistance - Fabrics Less Than 3mm (Martindale Tester) ORIGINAL STATE (1,000 movements)	ASTM D4970/D4970M - ACT	1 yard	\$20.00		
Seam Slippage - Upholstery (Both Fabric Directions)	ASTM D4034 - ACT	1 yard	\$60.00		
Seam Slippage - Drapery (Both Fabric Directions)	ASTM D434 & ASTM D3597 - ACT	1 yard	\$60.00		
Seam Break Strength and Seam Slippage-Failure in Sewn Seams	ASTM D1683; AHFA JIFS&G Ch.21	1 yard	\$60.00		
Break Strength and Elongation of Fabrics - Grab Test <b>Accredited ISO/IEC 17025</b>	ASTM D5034; AHFA JIFS&G Ch. 26	1 yard full width	\$30.00		
Break Strength & Elongation - Woven & Knit Upholstery <b>Accredited ISO/IEC 17025</b>	ASTM D5034 - ACT	1 yard	\$30.00		
Break Strength & Elongation - Woven/Knit Wrapped Panels & Upholstered Walls <b>Accredited ISO/IEC 17025</b>	ASTM D5034 - ACT	1 yard	\$30.00		
Tear Strength of Fabrics - Tongue Tear (Single Rip) - Knit Upholstery	ASTM D2261; AHFA JIFS&G Ch. 25	1 yard	\$30.00		
Tear Strength of Fabrics - Trapezoid Procedure - Tricot <b>Accredited ISO/IEC 17025</b>	ASTM D5587-08; AHFA JIFS&G Ch. 25	1 yard	\$30.00		
Elongation - Woven Upholstery Fabric	AHFA JIFS&G Ch. 10	1 yard full width	\$24.20		
Colorfastness to Crocking	AATCC 8; AHFA JIFS&G Ch. 5	1 yard full width	\$12.00		
Wet & Dry Crocking - ACT guidelines for Upholstery, Wallcoverings or Drapery	AATCC 8 - ACT	12" x 12"	\$12.00		
Colorfastness to Water	AATCC 107; AHFA JIFS&G Ch. 4	12" x 12"	\$12.00		
Colorfastness to Solvent	ASTM D3597-6.7; AHFA JIFS&G Ch. 4	12" x 12"	\$17.00		
Colorfastness to Light - Option E AFU hours to expose: _____ \$2.50 pr hour	AATCC 16; AHFA JIFS&G Ch. 6	12" x 12"	\$2.50		
Colorfastness to Light-Opt 3 ACT - Upholstery AFU hours expose: <u>40</u> \$2.50 pr hour	AATCC 16.3 - ACT	12" x 12"	\$100.00		
Colorfastness to Light-Opt 3 ACT - Wall Coverings AFU hours expose: <u>40</u> \$2.50 pr hour	AATCC 16.3 - ACT	12" x 12"	\$100.00		
Colorfastness to Light-Opt 3 ACT - Drapery AFU hours expose: <u>60</u> \$2.50 pr hour	AATCC 16.3 - ACT	12" x 12"	\$150.00		
Dimensional Stability To Water	AHFA JIFS&G Ch. 9	1 yard full width	\$12.10		
Picks Per Inch (Yarn Count)	ASTM D3775; AHFA JIFS&G Ch. 15	1/4 full width	\$18.00		
Determination of Number of Threads Per Unit Length - Woven Fabrics	CAN/CGSB-4.2 No. 6-2013	1/4 full width	\$18.00		

Fiber Migration	AHFA JIFS&G Ch. 27	1 yard	\$35.00		
<b>Colorfastness Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Colorfastness to Chlorine Bleach	AATCC/ASTM TS-001	1	\$12.00		
Colorfastness to Chlorine Bleach	AATCC 61 5A	1	\$12.00		
Colorfastness to Sodium Hypochlorite Bleach in Home Laundering	AATCC 188	1	\$45.00		
Colorfastness to Crocking - Wet and Dry	AATCC 8	1	\$12.00		
Colour fastness to Crocking/Rubbing	ISO 105-X12:2001	1	\$12.00		
Colorfastness to Crocking	CAN/CGSB 4.2 No. 22-2004	1	\$12.00		
Colorfastness to Heat: Dry (Excluding Pressing) Procedure I - 150±2°C	AATCC 117 Procedure I	1	\$12.00		
Colorfastness to Heat: Dry (Excluding Pressing) Procedure II - 180±2°C	AATCC 117 Procedure II	1	\$12.00		
Colorfastness to Heat: Dry (Excluding Pressing) Procedure III - 210±2°C	AATCC 117 Procedure III	1	\$12.00		
Colorfastness to Laundering - Accelerated <b>Option: 1A</b>	AATCC 61 Option: 1A	1	\$12.00		
Colorfastness to Laundering - Accelerated <b>Option: 1B</b>	AATCC 61 Option: 1B	1	\$12.00		
Colorfastness to Laundering - Accelerated <b>Option: 2A</b>	AATCC 61 Option: 2A	1	\$12.00		
Colorfastness to Laundering - Accelerated <b>Option: 3A</b>	AATCC 61 Option: 3A	1	\$12.00		
Colorfastness to Laundering - Accelerated <b>Option: 4A</b> with sodium hypochlorite	AATCC 61 Option: 4A	1	\$18.00		
Colorfastness to Laundering - Accelerated <b>Option: 5A</b> with sodium hypochlorite	AATCC 61 Option: 5A	1	\$18.00		
Colour fastness to Laundering - Accelerated	ISO 105 C-06:1994	1	\$12.00		
Colorfastness to Laundering - Accelerated	CAN/CGSB 4.2 No. 19.1-2004 (#2)	1	\$12.00		
Colorfastness After Actual Home Laundering	AATCC/ASTM TS-007	2	\$12.00		
Colorfastness to Light: Xenon-Arc - Option 3 or E or 16.3 - \$2.50/hr. Exposure hrs. _____	AATCC 16 e or 3 or 16.3	1 or >12"x12"	\$2.50		
Colour fastness to Artificial Light - Xenon Arc Fading Lamp Test	ISO 105-B02:1994	1	\$75.00		
Colorfastness to Artificial Light - Xenon Arc Fading Lamp Test	CAN/CGSB 4.2 18.3-97	1	\$75.00		
Colorfastness to Non-Chlorine Bleach	AATCC/ASTM TS-001	1	\$12.00		
Colorfastness to Non-Chlorine Bleach (Home Launderers 5X)	AATCC 172	1	\$37.00		
Colorfastness to Perspiration - Acid Perspiration Solution Only	AATCC 15 Acid Only	6"x6" Swatch (1sock)	\$17.00		
Colorfastness to Perspiration - Acid & Alkaline Perspiration Solution	AATCC 15 Acid & Alkaline	6"x6" Swatch (1sock)	\$34.00		
Colour fastness to Perspiration	ISO 105-E04:1994	6"x6" Swatch (1sock)	\$34.00		
Colorfastness to Perspiration	CAN/CGSB 4.2 No. 23-M90	6"x6" Swatch (1sock)	\$34.00		
Colorfastness to Saliva	DIN V 53160-1 2002	1	\$16.50		
Colorfastness to Water	AATCC 107	6"x6" Swatch (1sock)	\$12.00		
Colour fastness to Water	ISO 105-E01:2010	6"x6" Swatch (1sock)	\$12.00		
Colourfastness to Water	CAN/CGSB-4.2 No. 20-M89	6"x6" Swatch (1sock)	\$12.00		
Colorfastness to Solvent Spotting: Perchloroethylene	AATCC 157	1	\$17.00		
Colorfastness to Solvent - Performance Specification for Woven Upholstery Fabrics	AATCC 107; ASTM D3597	1	\$17.00		
Colorfastness to Sea Water	AATCC 106	6"x6" Swatch (1sock)	\$12.00		
Colorfastness to Water Spotting	AATCC 104	2	\$12.00		
Colorfastness to Perspiration and Light	AATCC 125	2	\$38.50		
Colorfastness: Dye Transfer in Storage; Fabric to Fabric - Option I (48 hour room temp test)	AATCC 163 Option I	6"x6" Swatch (1sock)	\$20.00		
Colorfastness: Dye Transfer in Storage; Fabric to Fabric - Option II (Accelerated 4 hour oven test)	AATCC 163 Option II	6"x6" Swatch (1sock)	\$12.00		
Colorfastness to Actual Dry Cleaning	AATCC 132	6"x6" Swatch (1sock)	\$16.50		
<b>Compression (Graduated) Testing:</b> contact: Jodi Geis 828-327-7000 x4115	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
<b>The below testing requires you to supply the testing lab with known wearing circumferences at the ankle/calf/thigh &amp; donning height or machine set up criteria</b>					
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Graduated Compression Hosiery	BS661210:2018-Sect 2	15 socks or legs	\$35.00		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Anti-Embolism Hosiery	BS661210:2018-Sect 3 Anti-embolism	15 socks or legs	\$35.00		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Graduated Support Hosiery	BS661210:2018-Sect 4 Subclinical	4 socks	\$35.00		
<b>The below testing requires you to supply the testing lab with the NAHM Sock Size</b>					
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - NAHM Profile Plate Size 11.0	BS661210:2018-Sect 4/MS-117	4 socks	\$35.00		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - NAHM Profile Plate Size 13.0	BS661210:2018-Sect 4/MS-117	4 socks	\$35.00		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - NAHM Profile Plate Size 15.0	BS661210:2018-Sect 4/MS-117	4 socks	\$35.00		
<b>The below testing requires you to supply the testing lab with known wearing circumferences and designated the spot to be tested</b>					
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Sleeves	BS661210:2018	4 sleeves	\$35.00		

<b>Graduated Compression Education on Knitting, Testing, Product Research, Etc.</b>					
Graduated Hosiery Compression Education - Knitting, Testing, Etc.			Email/Call for Info		
<b>Abrasion Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Abrasion Resistance - Fabric (Martindale Tester): Option 1 = hole in knits or Option 1 = 2 ends break in wovens Up to 25,000 movements	ASTM D4966 Option 1	1/2 yard	\$50.00		
Movements past 25,000 are \$10 per each 5,000 movements		1/2 yard	\$10.00		
Abrasion Resistance - Fabric (Martindale Tester): Option 2=change in shade/appearance	ASTM D4966 Option 2	1/2 yard	\$50.00		
Abrasion Resistance - Fabric (Martindale Tester): Option 3=mass loss as a percentage	ASTM D4966 Option 3	1/2 yard	\$50.00		
Abrasion Resistance - Fabric (Martindale Tester) - Specimen Breakdown	ISO 12947-2:1998	1/2 yard	\$50.00		
Movements past 25,000 are \$10 per each 5,000 movements		1/2 yard	\$10.00		
Abrasion Resistance - Fabric (Martindale Tester) - Mass Loss	ISO 12947-3:1998	1/2 yard	\$50.00		
Movements past 25,000 are \$10 per each 5,000 movements		1/2 yard	\$10.00		
Abrasion Resistance- <b>Socks</b> Straight Line Abrasion up to 10,000 cycles - Must have NAHM sock size <b>Circle Which Area to Test: Sole of Foot, Ball of Foot, Heel</b>	THA Martindale Abrasion Method	3 Socks	\$50.00		
Cycles past 10,000 are \$5.00 each additional 1,000 cycles			\$5.00		
Abrasion Resistance Determination	BS3424-24: 1990 Method 27A	1/2 yard	\$48.40		
<b>Pill and Snag Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Pilling Resistance - Fabrics Thicker Than 3mm (Random Tumble Pill Tester) at 30 minutes	ASTM D3512/D3512M	3 or 1/2 yard	\$20.00		
Resistance to Pilling - Random Tumble Pilling Tester KNIT FABRIC at 5, 10, 20 and 30 minutes	CAN/CGSB-4.2 No. 51.2-M87 Knit	3 or 1/2 yard	\$25.00		
Resistance to Pilling - Random Tumble Pilling Tester WOVEN FABRIC at 30 and 60 minutes	CAN/CGSB-4.2 No. 51.2-M87 Woven	3 or 1/2 yard	\$25.00		
Adding 90 and 120 minutes (addition to 30 and 60 minutes)	CAN/CGSB-4.2 No. 51.2-M87		\$10.00		
Propensity to Pilling, Fuzzing or Matting - Random Tumble Pill Method	ISO 12945-3:2014 (E)	3 or 1/2 yard	\$25.00		
Pilling Resistance - Fabrics Less Than 3mm (Martindale Tester) <b>ORIGINAL STATE</b>	ASTM D4970/D4970M	1 yard	\$20.00		
Pilling Resistance - Fabrics Less Than 3mm (Martindale Tester) <b>AFTER 1X LAUNDERING</b> (provide laundering instructions on Page 1)	ASTM D4970/D4970M	1 yard	\$23.50		
Pilling Resistance: ICI Pill Box Method 2 hour run time	ISO 12945-1: 2000	1/2 yard	\$45.00		
Pilling Resistance: ICI Pill Box Method 4 hour run time	ISO 12945-1: 2000	1/2 yard	\$65.00		
Pilling Resistance: Rotating Box Method 10 hour run time	CAN/CGSB-4.2 No.51.1-95	1/2 yard	\$125.00		
Brush Pilling: Pilling Resistance	ASTM D3511	1/2 yard	\$35.00		
Pilling After Repeated Home Laundering - Appearance of Pill and Fuzz - After 1X Home Laundering		2 garments/ 1/2 yard	\$13.50		
Pilling After Repeated Home Laundering - Appearance of Pill and Fuzz - After 3X Home Laundering		2 garments/ 1/2 yard	\$20.50		
Pilling After Repeated Home Laundering - Appearance of Pill and Fuzz - After 5X Home Laundering		2 garments/ 1/2 yard	\$27.50		
Snagging - ABC Tester	ASTM D3939/D3939M	1 yard	\$20.00		
Snagging - SnagPod Tester	BS 8479	1 yard	\$45.00		
Snag Resistance - Penney's Snag Tester	VF Workwear Work Instruction: WW-300	1/2 yard	\$18.00		
<b>Stretch Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Stretch Properties of Textile Fabrics - CRE Method	ASTM D6614	1 yard	\$35.00		
Stretch Properties of Knitted Fabrics Having Low Power - Elastic Recovery	ASTM D2594	1	\$40.00		
Stretch Properties - Tension and Elongation of Elastic Fabrics	ASTM D4964	1	\$40.00		
Stretch Properties of Fabrics Woven from Stretch Yarns	ASTM D3107	1	\$50.00		
<b>Tensile, Burst, Tear, Seam Strength and Peel Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Burst Strength - CRE Method (for socks and hosiery)	ASTM D6797	5	\$13.00		
Burst Strength - Mullen Burst Tester	ASTM D3786/D3786M	5	\$13.00		
Burst Strength - Diaphragm Pressure Test - Mullen Burst Tester	CAN/CGSB-4.2 No. 11.1-94 2013	5	\$13.00		
Break Strength & Elongation of Fabrics - Grab Test <b>Accredited ISO/IEC 17025</b>	ASTM D5034	1 yard	\$30.00		
Break Strength & Elongation of Fabrics - Grab Test	ISO 13934-2-2014	1 yard	\$30.00		
Breaking Strength of Fabrics - Grab Method - Constant-Time-to-Break Principle	CAN/CGSB-4.2 No. 9.2-M90	1 yard	\$30.00		
Break Strength - Grab Test of Coated Fabrics	ASTM D751 Sect 12-15; Proc A	1 yard	\$30.00		
Break Strength & Elongation of Fabrics - Strip Method	ASTM D5035	1 yard	\$30.00		
Break Strength & Elongation of Fabrics - Strip Method	ISO 13934-1:2013	1 yard	\$30.00		
Tearing Strength - Single Rip Method	CAN/CGSB-4.2 No. 12.1-M90	1 yard	\$30.00		
Breaking Force & Elongation of Nonwoven Materials (Strip Method)	WSP 110.4 2009	1 yard	\$30.00		



Grab Breaking Load & Elongation of Geotextiles	ASTM D4632	1 yard	\$30.00		
Tear Strength of Fabrics - Tongue Tear (Single Rip)	ASTM D2261	1 yard	\$30.00		
Tearing Strength of Fabrics by Falling-Pendulum (Elmendorf-Type)	ASTM D1424	1 yard	\$60.00		
Tear Strength of Non-woven Fabrics - Tongue Tear (Single Rip)	ASTM D5735	1 yard	\$30.00		
Tearing Strength of Nonwoven Fabrics by the Tongue Tear (Single Rip) Procedure (CRE)	WSP 100.3 2009	1 yard	\$30.00		
Tear Strength of Fabrics - Trapezoid Procedure <i>Accredited ISO/IEC 17025</i>	ASTM D5587	1 yard	\$30.00		
Trapezoid Tear Strength of Geotextiles	ASTM D4533	1 yard	\$30.00		
Tear Strength of Non-Woven Fabrics-Trapezoid Procedure <i>Accredited ISO/IEC 17025</i>	ASTM D5733	1 yard	\$30.00		
Tear Strength of Nonwoven Fabrics by the Trapezoid Procedure	WSP 100.2 2009	1 yard	\$30.00		
Failure in Sewn Seams in Woven Apparel Fabric - Seam Strength	ASTM D 1683	1 yard	\$60.00		
Seam Slippage - Woven Fabrics (testing both directions)	ASTM D434	1 yard	\$60.00		
Seam Slippage - Woven Fabrics (testing both directions)	ISO 13936-1	1 yard	\$60.00		
Seam Slippage - Upholstery	ASTM D4034	1 yard	\$60.00		
Pocket Reinforcement	ASTM D7506/D7506M	3 garments	\$30.00		
Breaking Strength and Elongation of Textile Webbing, Tape and Braided Material	ASTM D6775	1 yard	\$35.00		
Strength and Elongation, Breaking (Webbing, Tape, and Braided Items)	Federal Test 191A method 4108	1 yard	\$35.00		
Strength and Elongation Breaking of Cordage: Non-Spliced Specimen Method	PIA-Test Method-6016	1 yard	\$35.00		
Performance of Bonded, Fused, and Laminated Apparel Fabrics	ASTM D2724	1/2 yard	\$30.00		
Performance of Bonded, Fused, and Laminated Apparel Fabrics - Bond Strength Option Only	ASTM D2724	1/2 yard	\$30.00		
Bond Strength of Bonded and Laminated Fabrics	AATCC 136	1/2 yard	\$30.00		
Break Strength & Elongation of Fabrics - as referenced in ASTM D4830 Roofing & Waterproofing	ASTM D4830 - ASTM D5035	1 yard	\$30.00		
Tear Strength of Non-Woven Fabrics-as referenced in ASTM D4830 Roofing & Waterproofing	ASTM D4830 - ASTM D5733	1 yard	\$30.00		
<b>Other Durability Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Applied Decorations	16 CFR 1500.51-52	3	\$13.00		
Snap Testing - Holding Strength of Prong Ring Attached Snap Fasteners	ASTM D7142	3 garments	\$24.20		
<b>Flammability Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Flammability of Wearing Apparel - Test face of fabric <i>Accredited CPSIA / ISO/IEC 17025</i>	16 CFR 1610/ASTM D1230	12 garments/1 yd	\$90.75		
Flammability of Wearing Apparel - Test face & back of fabric <i>Accredited CPSIA / ISO/IEC 17025</i>	16 CFR 1610/ASTM D1230	12 garments/1 yd	\$150.75		
Flammability Apparel Exemption - Fabric Weight <i>Accredited CPSIA / ISO/IEC 17025</i>	16 CFR 1610 (ASTM D3776)	3 garments / 1' x 1'	\$24.20		
Flammability Apparel Exemption - Fiber Content <i>Accredited CPSIA / ISO/IEC 17025</i>	16 CFR 1610 (AATCC 20 & 20A)	3 garments / 1' x 1'	\$40.00		
Flame Resistance - 45° Angle Test - One Second Flame Impingement	CAN/CGSB-4.2 No. 27.5-2008	12 garments/1 yd	\$80.00		
Vertical Flammability	Federal Test 191A method 5903	10 garments/1 yd	\$90.75		
Vertical Flammability	ASTM D6413-07 (2011)	10 garments/1 yd	\$90.75		
Vertical Flammability - Flame Impingement	ASTM F1358-00 (2005)	10 garments/1 yd	\$90.75		
NFPA 701 - Fire Tests for Flame Propagation of Textiles and Films	NFPA 701 TM1	10 garments/1 yd	\$90.75		
California Technical Bulletin 117-2013	CA TB117-2013	1/2 yard	\$90.00		
Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture-Cover Fabric Test	NFPA 260-2013	1/2 yard	\$90.00		
UFAC -Fabric Classification	UFAC	1/2 yard	\$90.00		
<b>Formaldehyde, Phenols, pH &amp; Alkali Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Formaldehyde Detection	JIS 112 L 1041	12" x 12"	\$35.00		
Formaldehyde Detection (Spot Test Method)	MSC-105 (Spot Test Method)	12" x 12"	\$30.00		
Formaldehyde Detection - Jar Method	AATCC 112	12" x 12"	\$35.00		
Formaldehyde Detection - Free and Hydrolyzed Determination of: Water Extraction Method	AATCC 206	12" x 12"	\$35.00		
Formaldehyde - Part 1: Free and Hydrolyzed Formaldehyde (Water Extraction Method) - Textile	ISO 14184-1 Part 1	12" x 12"	\$35.00		
Formaldehyde - Part 2: Released Formaldehyde (Vapour Absorption Method) - Textile	ISO 14184-1 Part 2	12" x 12"	\$35.00		
pH Level	AATCC 81	12" x 12"	\$15.00		
pH of aqueous extract	BS EN ISO 3071:2006	12" x 12"	\$15.00		
Phenolic Yellowing (propensity to yellow)	ISO 105-X18	12" x 12"	\$20.00		
Phenol Levels (Textiles)	MSC Phenol Level Method	12" x 12"	\$20.00		
Phenol Levels (Plastics)	EPA Method 420.1 - Modified	12" x 12"	\$20.00		

Alkalinity	AATCC 144	12" x 12"	\$20.00		
<b>Metal/Lead Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Metal/Lead Screening using XRF Gun	ASTM F2853-10	Call for details	\$35.00		
<b>Moisture Management Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Absorbency - to be performed after 1 home laundering	AATCC/ASTM TS-018	2	\$15.00		
Absorbency - to be performed after 1 home laundering - Option A: Burette Stand Method	AATCC 79: Option A	2	\$15.00		
Absorbency - to be performed after 1 home laundering - Option B: Medicine Dropper Method	AATCC 79: Option B	2	\$15.00		
Absorption of Nonwovens - Liquid Absorptive Capacity	ISO 9073-6 Part 6 Section 5	2	\$15.00		
Absorption of Nonwovens - Liquid wicking rate	ISO 9073-6 Part 6 Section 6	2	\$26.60		
Drying Rate - to be performed after 1 home laundering	HTC Scale Method	2	\$26.60		
Drying Rate - Heated Plate Method	AATCC 201	1/2 yard	\$40.00		
Drying Rate - Air Flow Method	AATCC 200	1/2 yard	\$75.00		
Liquid Moisture Management Properties of Textile Fabrics - MMT Method	AATCC-195	5	\$40.00		
Vertical Wicking-Option A Time at given distance; <b>ORIGINAL STATE</b>	AATCC 197 - Option A ORIGINAL	3	\$30.00		
Vertical Wicking-Option A Time at given distance; <b>AFTER LAUNDERING</b> _____ CYCLES provide laundering instructions on Page 1 - <b>Added charges for laundering</b>	AATCC 197 - Option A LAUNDERED	3	\$30.00		
Vertical Wicking-Option B Measure distance at given time; <b>ORIGINAL STATE</b>	AATCC 197 - Option B ORIGINAL	3	\$30.00		
Vertical Wicking-Option B Distance at given time; <b>AFTER LAUNDERING</b> _____ CYCLES provide laundering instructions on Page 1 - <b>Added charges for laundering</b>	AATCC 197 - Option B LAUNDERED	3	\$30.00		
Vertical Wicking - Distance Over Time; to be performed after 1 home laundering	TPACC Method	3	\$30.00		
Vertical Wicking - Time Over Distance; to be performed after 1 home laundering	AATCC/ASTM TS-017	3	\$30.00		
Horizontal Wicking of Textiles	AATCC 198	1/2 yard	\$30.00		
Water Repellency: Spray Test	AATCC 22	1/2 yard	\$15.00		
Determination of Resistance to Surface Wetting (Spray Test)	ISO 4920:2012	1/2 yard	\$15.00		
Water Resistance: Impact Penetration Test	AATCC 42	1/2 yard	\$18.00		
Surface Water Absorption of Terry Fabrics (Water Flow)	ASTM D4772	1 yard	\$38.50		
Aqueous Liquid Repellency: Water/Alcohol Solution Resistance Test	AATCC 193	2	\$15.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Desiccant Method at 23°C	ASTM E96 Procd A 24 hr run time	3 garments / 3' x 3'	\$165.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Water Method at 23°C	ASTM E96 Procd B 24 hr run time	3 garments / 3' x 3'	\$165.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Inverted Cup Method BW	ASTM E96 Procd BW 24 hr run time	3 garments / 3' x 3'	\$165.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Desiccant Method at 32.2°C	ASTM E96 Procd D 24 hr run time	3 garments / 3' x 3'	\$165.00		
Water Vapor Transmission of Textiles	AATCC 204				
Water Resistance: Hydrostatic Pressure Test	AATCC 127	1/2 yard	\$30.00		
Water Resistance: Hydrostatic Pressure Using a Restrain Test	AATCC 208	1/2 yard	\$30.00		
<b>Physical Testing:</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Oil Repellency: Hydrocarbon Resistance Test	AATCC 118	1/4 yard	\$15.00		
Oil Repellency: Hydrocarbon Resistance Test	ISO 14419-2010	1/4 yard	\$15.00		
Soil Release - Oily	AATCC 130	1 yard/2 garment	\$20.00		
Additional Stains for Soil Release Test _____			\$5.50		
Evaluating Stain Removal Performance in Home Laundering - up to 6 Stains (excluding blood)	ASTM D4265	2 yards or MSC will provide fabric	\$50.00		
Additional Stains for Soil Release Test _____			\$5.50		
Float Loop Length and Pattern Yarn Strings in Socks		2 Socks	\$15.00		
Appearance After Home Laundering-Color Change, Skew, Pill, Fuzz Additional charge for > 1 wash	AATCC/ASTM TS-008	2 garments/ 1/2 yard	\$20.00		
Appearance of Apparel and Other Textile End Products after Home Laundering	AATCC 143	2 garments/ 1/2 yard	\$30.00		
Air Permeability - US Standard (38 cm <sup>2</sup> sample head; 125 Pa; cfm)	ASTM D737	2 garments/ 1/2 yard	\$20.00		
Air Permeability - British Standard (5 cm <sup>2</sup> sample head, 98 Pa, cm <sup>3</sup> /cm <sup>2</sup> /s)	BS 5636	2 garments/ 1/2 yard	\$20.00		
Air Permeability of Nonwoven Materials	WSP 70.1 2008	1/2 yard	\$20.00		
Air Permeability - US Standard (20 cm <sup>2</sup> sample head; 125 Pa; cfm)		2 garments/ 1/2 yard	\$20.00		
Air Permeability - Australian Standard (38 cm <sup>2</sup> sample head, 98 Pa, cm <sup>3</sup> /cm <sup>2</sup> /s)	AS 2001.2.34-1990	2 garments/ 1/2 yard	\$20.00		
Air Permeability - International Standard (20 cm <sup>2</sup> sample head; 100 Pa (1mbar); mm/s) (Apparel)	ISO 9237-1995	2 garments/ 1/2 yard	\$20.00		
Air Permeability - International Standard (20 cm <sup>2</sup> sample head; 200 Pa; mm/s) (Industrial Fabrics)	ISO 9237-1995	2 garments/ 1/2 yard	\$20.00		
Care Instruction Confirmation	ASTM D3938	3	\$85.00		

Care Instruction Establish	ASTM D3938	7	\$130.00		
Fabric Weight - Option B - Full Width Sample	<b>Accredited ISO/IEC 17025</b> ASTM D3776 - Option B	1 yard	\$13.00		
Fabric Weight - Option C - Small Swatch of Fabric	<b>Accredited ISO/IEC 17025</b> ASTM D3776 - Option C	2 garments/ ½ yard	\$13.00		
Fabric Weight - Option D - Narrow Fabric	<b>Accredited ISO/IEC 17025</b> ASTM D3776 - Option D	2 garments/ ½ yard	\$13.00		
Fabric Weight - Option B (modified) - Full SOCK Weight	<b>Accredited ISO/IEC 17025</b> ASTM D3776 - Sock Weight	1 yard	\$13.00		
Fabric Weight (Mass Per Unit Area)	ISO 3801:1977 Method 5	2 garments/ ½ yard	\$13.00		
Unit Mass of Fabrics	CAN/CGSB-4.2 No. 5.1-M90	2 garments/ ½ yard	\$13.00		
Fabric Weight (Mass Per Unit Area) (Nonwovens)	WSP 130.1 2009	2 garments/ ½ yard	\$13.00		
Fabric Mass - Coated Fabrics	ASTM D751 Sect 10.2	½ yard	\$13.00		
Fabric Width	ASTM D3774	3 yards full width	\$13.00		
Determination of Width and Length of Textile Fabrics	CAN/CGSB-4.2 No. 4.1-2008	3 yds full width (min)	\$25.00		
Dimensional Change / Stability (Shrinkage) - Fabrics After Home Laundering at 3X	AATCC 135 - 3X	2 yards full width	\$33.00		
Dimensional Change / Stability (Shrinkage) - Garments After Home Laundering at 3X	AATCC 150 -3X	3 garments	\$33.00		
Dimensional Change / Stability (Shrinkage) - Fabrics After Home Laundering at 5X	AATCC 135 - 5X	2 yards full width	\$39.00		
Dimensional Change / Stability (Shrinkage) - Garments After Home Laundering at 5X	AATCC 150 - 5X	3 garments	\$39.00		
Dimensional Change / Stability (Shrinkage) -Socks After Home Laundering by Stretch Method	AATCC 135 / Stretch Method	3 socks	\$33.00		
Dimensional Change / Stability (Shrinkage) - ISO Method (1X)	ISO 5077:2007	3 garments	\$33.00		
Dimensional Change / Stability (Shrinkage) - Canadian Method	CAN/CGSB-4.2 No. 58-2019	3 garments	\$33.00		
Dimensional Change / Stability (Shrinkage) - Drycleaning in Perchloroethylene: Machine Method 1X	AATCC 158 - 1X	2 yards full width	\$30.00		
Dimensional Change / Stability (Shrinkage) - Drycleaning in Perchloroethylene: Machine Method 3X	AATCC 158 - 3X	2 yards full width	\$45.25		
Dimensional Change / Stability (Shrinkage) - Drycleaning in Perchloroethylene: Machine Method 5X	AATCC 158 - 5X	2 yards full width	\$50.00		
Linear Dimensional Change	ASTM D1204	½ yard	\$50.00		
Fit Properties of Socks - NAHM forms & Stretch information - ORIGINAL STATE	HIFOMACO LCS 4800	3 Socks	\$25.00		
Fit Properties of Socks - NAHM forms & Stretch information - AFTER 3 HOME LAUNDERINGS	HIFOMACO LCS 4800	3 Socks	\$35.50		
Fit Properties of Socks - NAHM forms ONLY - ORIGINAL STATE	HIFOMACO LCS 4800	3 Socks	\$12.50		
Fit Properties of Sheers and Tights - THA Volumetric Forms		1 Sheer/Tight	\$30.25		
Fit Properties of Sheers and Tights - Stretch Information	HIFOMACO HT - 36L	1 Sheer/Tight	\$30.25		
Relaxed Layout of Socks/Hosiery		3 Socks/Hosiery	\$15.00		
Smoothness Appearance of Fabrics After Repeated Home Laundering	AATCC 124	3 garments	\$20.00		
Smoothness of Seams in Fabrics After Repeated Home Laundering - Single and Double Seam	AATCC 88B	1 garment	\$20.00		
Retention of Creases in Fabrics after Repeated Home Laundering	AATCC 88C	1 garment	\$20.00		
Assessing the Appearance of Creases in Fabric After Cleansing	ISO 7769-2009	1 garment	\$20.00		
Skewness Change in Fabric and Garment Twist	AATCC 179	3 garments	\$30.25		
Stiffness of Fabrics - Option A: Using the Shirley Stiffness Tester	ASTM D1388 - Option A	½ yard	\$45.00		
Fabric Thickness	MSC Method	¼ yard	\$11.00		
Testing Lab Technician Hourly Rate \$50/hr.			\$50.00		
<b>Repeated Home Laundering</b>	<b>Testing Method</b>	<b>Price is:</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Repeated Home Laundering (\$4.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC LP1	Per wash/dry cycle	\$4.00		
Repeated Home Laundering (\$4.00 per Laundering)-AATCC Powder Detergent WITH Brightener	AATCC LP1		\$4.00		
Repeated Home Laundering (\$4.00 per Laundering)-AATCC Liquid Detergent w/o Brightener	AATCC LP1		\$4.00		
Repeated Home Laundering (\$4.00 per Laundering)-Other:_____	AATCC LP1		\$4.00		
Repeated Home Laundering at Temps above 120°f (\$4.50 per Laundering)	AATCC LP1		\$4.50		
Repeated Hand Laundering (\$4.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC LP2		\$4.00		
Domestic Washing and Drying Procedures for Textile Testing	ISO 6330:2012		\$5.00		
Repeated Home Laundering (\$4.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC135 (3, IV, A, iii) for FR fabrics		\$4.00		
<b>Repeated Industrial Laundering</b>	<b>Testing Method</b>	<b>Price is:</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Repeated Industrial Laundering (\$12.00 per Laundering)-AATCC Powder Detergent w/o Brightener	ISO 15797	Per wash/dry cycle	\$12.00		
Repeated Industrial Laundering (\$12.00 per Laundering)-AATCC Liquid Detergent w/o Brightener	ISO 15797		\$12.00		
Repeated Industrial Laundering (\$12.00 per Laundering)-Other:_____			\$12.00		
<b>Foam Testing</b>	<b>Testing Method</b>	<b>Price is:</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Foam Density	ASTM D3574 Test A	Volume more than 1000mm3	\$30.00		



Foam Indentation Force Deflection Test-Specified Deflection (IFD)	ASTM D3574 Test B1	More than 380mm x 380mm x 100mm	\$44.00		
<b>Weather and Light Stability</b>	<b>Testing Method</b>	<b>Amount Needed</b>	<b>Price</b>	<b># of Test</b>	<b>Total</b>
Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials (UVA)	ASTM G154-06 exposure hrs. _____ Option? _____		\$2.50		
Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials	ASTM G155-05a exposure hrs. _____ Option? _____		\$2.50		
Weather Resistance of Textiles: Xenon Lamp Exposure	AATCC 169 exposure hrs. _____ Option? _____	4 yards or 10 garments	\$2.50		
Weather Resistance: UV Light and Moisture Exposure	AATCC 186 exposure hrs. _____ Option? _____	4 yards or 10 garments	\$2.50		
Colorfastness to Light: Xenon-Arc - Option 3 or E or 16.3 - \$2.50/hr. -	AATCC 16.3 exposure hrs. _____	> 12" x 12" sample	\$2.50		
Colorfastness to Light: Outdoor-Option 16.1 (Actual outdoor weathering utilizing a weathering station)	AATCC 16.1 exposure hrs. _____		\$2.50		
Xenon-Arc Exposure Plastics Outdoors Cycle 1 - \$2.50/hr.	ASTM D2565-99/01 exposure hrs. _____		\$2.50		
Geotextile Deterioration-Light, Moisture & Heat using Xenon Arc	ASTM D4355-07 exposure hrs. _____	2 linear yards	\$2.50		
Weatherability of Automotive Parts	JIS D 0205 exposure hrs. _____		\$2.50		
Rubber Deterioration - Using Artificial Weathering Apparatus (Xenon-Arc)	ASTM D750-12 exposure hrs. _____		\$2.50		
Rubber Deterioration - Using Artificial Weathering Apparatus (QUV-UVA)	ASTM D750-12 exposure hrs. _____		\$2.50		
Rubber Deterioration - Discoloration from UV & heat Exposure of Light Colored Surfaces	ASTM D1148-07a exposure hrs. _____		\$2.50		
Accelerated Weathering Test Conditions and Procedures for Bituminous Materials - Cycle A	ASTM D4798-04 exposure hrs. _____		\$2.50		
Accelerated Exposure of Automotive Interior Trim Components - Flat Array Xenon Arc Apparatus	SAE J2412-04 exposure hrs. _____		\$2.50		
<b>Other:</b>	<b>Testing Method</b>			<b># of Test</b>	<b>Total</b>
					<b>Total</b>
<b>Shipping/Return Samples to Customer (If Applicable) - Tracking Number &amp; Carrier</b>		<b>Handling Fee</b>	\$0.00		\$0.00
<b>Carrier:</b> _____ <b>Tracking #:</b> _____		<b>Shipping Cost</b>	\$0.00		
<b>SUB-TOTAL</b>				0	
<b>EXPRESS TESTING</b>				0	
Results from testing may include confidential and proprietary information. I agree to keep this information confidential. I understand that results may be used for research purposes only.				<b>Total Cost</b>	
Lab Manager's Signature _____ <i>Jodi B. Greis</i> Date _____ 2/1/2020					
<b>We accept major credit cards. Call for details (828-327-7000 x4265)</b>					

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

MANUFACTURING SOLUTIONS CENTER  
WARRANTY & LIABILITY WAIVER

The Trustees of Catawba Valley Community College (“CVCC”) and Manufacturing Solutions Center (“MSC”), 301 Conover Station SE, Conover, North Carolina 28613, offers MSC testing services with the terms, conditions, and notices as follows:

**Terms of Use**

MSC’s testing services offered to you are conditioned upon your acceptance without modification of the terms, conditions, and notices herein.

**Limitation of Liability**

In no event shall CVCC or MSC be liable for any direct, indirect, punitive, incidental, special consequential damages whatsoever arising out of or connected with any products or materials tested by MSC, including the use, inability to use, or performance of products or materials.

**Limited Warranty**

No claims, representations, or warranties, whether express or implied, are made by MSC or CVCC as to the safety, reliability, durability, and/or performance of any tested products. You agree to waive any and all warranties.

**Other Statements**

CVCC and MSC employees and representatives’ oral or other written statements do not constitute warranties and shall not be relied upon by you.

**Enforceability**

If any part of this Warranty & Liability Waiver is determined to be void, invalid, unenforceable, or illegal, then the invalid or unenforceable provision will be deemed superseded by a valid, enforceable provision that most closely matches the intent of the original provision and the remainder of the provisions shall remain in full force or effect.

**Choice of Law**

This Warranty & Liability Waiver is governed by the laws of the State of North Carolina.

**Modification of Terms and Conditions**

MSC reserves the right to change the terms, conditions, and notices under which their services are offered.