



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**Manufacturing Solutions Center  
a.k.a Hosiery Technology Center  
A division of Catawba Valley Community College  
301 Conover Station SE  
Conover, NC 28613**

Fulfills the requirements of

**ISO/IEC 17025:2017**

In the field of

**TESTING**

This certificate is valid only when accompanied by a current scope of accreditation document.  
The current scope of accreditation can be verified at [www.anab.org](http://www.anab.org).

A handwritten signature in black ink, appearing to be 'J. Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 01 February 2025

Certificate Number: L2238



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory  
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017**

**Manufacturing Solutions Center  
a.k.a. Hosiery Technology Center  
A division of Catawba Valley Community College**

301 Conover Station SE  
Conover, NC 28613  
Kathy Alexander  
828 327 7000 ext. 4151

**TESTING**

Valid to: **February 01, 2025**

Certificate Number: **L2238**

**Microbiological**

<b>Specific Tests and/or Properties Measured</b>	<b>Specification, Standard, Method, or Test Technique</b>	<b>Items, Materials or Product Tested</b>	<b>Key Equipment or Technology</b>
Assessment of Antibacterial Finishes  (See Notes 2 and 3)	AATCC 100	Textiles	Spectrophotometer, Hoods, Incubators, Automatic Enumeration systems (Tempo, Q-counter)
Antibacterial Activity: Parallel Streak Method  (See Notes 2 and 3)	AATCC 147	Textiles	Hoods, Incubators
Antimicrobial Activity  (See Note 2)	ASTM E2149	Textiles	Spectrophotometer, Hoods, Incubators, Automatic Enumeration systems (Tempo, Q-counter)



**ANSI National Accreditation Board**

**Mechanical**

<b>Specific Tests and/or Properties Measured</b>	<b>Specification, Standard, Method, or Test Technique</b>	<b>Items, Materials or Product Tested</b>	<b>Key Equipment or Technology</b>
Flammability	16 CFR 1610 ASTM D1230	Clothing Textiles	Flammability Test Chamber
Breaking Strength/ Elongation of Textile Fabrics (Grab Test)  (See Note 4)	ASTM D5034	Textiles	CRE Tensile Testing Machine
Tearing Strength of Fabrics - Trapezoid  (See Note 4)	ASTM D5587	Textiles	CRE Tensile Testing Machine
Tearing Strength of nonwoven fabrics - Trapezoid  (See Note 4)	ASTM D5733-99	Textiles	CRE Tensile Testing Machine
Mass per unit Area  (See Note 4)	ASTM D3776	Textiles	Gravimetric
Water Resistance: Impact Penetration  (See note 7)	AATCC TM 42  And also, as Referenced in ANSI/AAMI PB70	Textiles	Impact Penetration Type I Tester
Water Resistance: Hydrostatic Pressure Test	AATCC TM 127  And also, as Referenced in ANSI/AAMI PB70	Textiles	Hydrostatic Head Tester
Failure in Sewn Seams of Woven Fabrics (Seam Strength)	ASTM D1683/D1683M – Seam Strength Sections only	Textiles	CRE Tensile Testing Machine
Resistance of Materials Used in Protective Clothing to Penetration by Synthetic Blood	ASTM F1670/F1670M  And also, as Referenced in ANSI/AAMI PB70	Textiles	Penetration Test Apparatus, Penetration Cell

**Mechanical**

<b>Specific Tests and/or Properties Measured</b>	<b>Specification, Standard, Method, or Test Technique</b>	<b>Items, Materials or Product Tested</b>	<b>Key Equipment or Technology</b>
Resistance of Materials Used in Protective Clothing to Penetration by Liquids	ASTM F903	Textiles	Penetration Test Apparatus, Penetration Cell
Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting – Liquid Penetration Resistance Test	NFPA 1971-17, Section 8.27 only	Textiles	Penetration Test Apparatus, Penetration Cell
General Purpose Office Chairs - Seating Durability Tests – Cyclic	ANSI/BIFMA X5.1, Section 10	Furniture	Drop Tester Universal Tester
General Purpose Office Chairs - Stability Tests (See Note 6)  (See Note 6)	ANSI/BIFMA X5.1, Section 11	Furniture	Universal Tester
General Purpose Office Chairs - Footrest Static Load Test – Vertical	ANSI/BIFMA X5.1, Section 18	Furniture	Universal Tester
General Purpose Office Chairs - Footrest Durability Test – Vertical – Cyclic	ANSI/BIFMA X5.1, Section 19	Furniture	Universal Tester
General Purpose Office Chairs - Structural Durability	ANSI/BIFMA X5.1, Section 24	Furniture	Universal Tester
Public and Lounge Seating – Backrest Strength Test – Horizontal – Static  (See Note 6)	ANSI/BIFMA X5.4, Section 5	Furniture	Universal Tester
Public and Lounge Seating – Backrest Strength Test – Vertical - Static	ANSI/BIFMA X5.4, Section 6	Furniture	Universal Tester
Public and Lounge Seating – Backrest Durability Test – Horizontal – Cyclic  (See Note 6)	ANSI/BIFMA X5.4, Section 7	Furniture	Universal Tester



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**Mechanical**

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Public and Lounge Seating – Backrest Durability Test – Vertical - Cyclic	ANSI/BIFMA X5.4, Section 8	Furniture	Universal Tester
Public and Lounge Seating – Arm Strength Test – Horizontal – Static	ANSI/BIFMA X5.4, Section 9	Furniture	Universal Tester
Public and Lounge Seating – Arm Strength Test – Vertical – Static	ANSI/BIFMA X5.4, Section 10	Furniture	Universal Tester
Public and Lounge Seating – Arm Durability Test – Horizontal – Cyclic	ANSI/BIFMA X5.4, Section 11	Furniture	Universal Tester
Public and Lounge Seating – Arm Durability Test for Multiple Seating Units – Vertical – Cyclic	ANSI/BIFMA X5.4, Section 12	Furniture	Universal Tester
Public and Lounge Seating – Arm Durability Test for Single Seating Units – Angular – Cyclic	ANSI/BIFMA X5.4, Section 13	Furniture	Universal Tester
Public and Lounge Seating – Seating Durability Tests - Cyclic	ANSI/BIFMA X5.4, Section 14	Furniture	Drop tester
Public and Lounge Seating – Drop Test – Dynamic	ANSI/BIFMA X5.4, Section 15	Furniture	Hoist
Public and Lounge Seating – Leg Strength Test – Front and Side Application	ANSI/BIFMA X5.4, Section 16	Furniture	Universal Tester
Public and Lounge Seating – Unit Drop Test – Dynamic	ANSI/BIFMA X5.4, Section 17	Furniture	Hoist
Public and Lounge Seating – Stability Tests	ANSI/BIFMA X5.4, Section 21	Furniture	Universal Tester

**Mechanical**

<b>Specific Tests and/or Properties Measured</b>	<b>Specification, Standard, Method, or Test Technique</b>	<b>Items, Materials or Product Tested</b>	<b>Key Equipment or Technology</b>
Public and Lounge Seating – Structural Durability Test – Side-to-side – Cyclic	ANSI/BIFMA X5.4, Section 24	Furniture	Universal Tester
General Purpose large Occupant Office Chairs - Seating Durability Tests - Cyclic	ANSI/BIFMA X5.11, Section 11	Furniture	Drop Tester Universal Tester
Desk/Table Products – Tests Stability Under Vertical Load Test	ANSI/BIFMA X5.5, Section 4.3	Furniture – Desk/Tables	Force Disks Weight Bags
Desk/Table Products – Tests Concentrated Functional Load Test	ANSI/BIFMA X5.5, Section 5.2	Furniture – Desk/Tables	Force Disks Weight Bags
Desk/Table Products – Tests Distributed Functional Load Test	ANSI/BIFMA X5.5, Section 5.3	Furniture – Desk/Tables	Weight Bags
Desk/Table Products – Tests Concentrated proof Load Test	ANSI/BIFMA X5.5, Section 5.4	Furniture – Desk/Tables	Force Disks Weight Bags
Desk/Table Products – Tests Distributed Proof Load Test	ANSI/BIFMA X5.5, Section 5.5	Furniture – Desk/Tables	Weight Bags
Desk/Table Products – Tests Top Load Ease Test	ANSI/BIFMA X5.5, Section 6	Furniture – Desk/Tables	Universal Tester
Desk/Table Products – Tests Desk/Table Unit Drop Test	ANSI/BIFMA X5.5, Section 7	Furniture – Desk/Tables	Hoist
Desk/Table Products – Tests Leg Strength Test	ANSI/BIFMA X5.5, Section 8	Furniture – Desk/Tables	Universal Tester
Standard Safety Specification for Clothing Storage Units Excluding section 9.3.3.1	ASTM F2057	Furniture	Force gauge Weights
Standard Performance Specification for Tipover Restraints Used with Clothing Storage Units	ASTM F3096	Furniture	Force gauge

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2238.
2. Automatic Enumeration systems are used in the Antimicrobial test methods.
3. Culture storage at 5 +/- 2 deg C.
4. Conditioning: Temperature at 21 +/- 2 deg C; Humidity at 65 +/- 5% RH.
5. This laboratory offers commercial testing service.
6. Modified Chair Measuring Device used.
7. Water testing conditions: Temperature at 21 +/- 2 deg C; Humidity at 65 +/- 5% RH



Jason Stine, Vice President

