

FLORIDA STATE UNIVERSITY JIM MORAN SCHOOL OF ENTREPRENEURSHIP

Textile Testing Lab

in the Jim Moran School of Entrepreneurship

The Textile Testing Lab at Florida State University provides the textile and apparel industry with physical textile testing services. The lab specializes in the assessment of product durability, the evaluation and development of product specifications, and end use performance.

Expert consultation is also available for assisting industry members with product development and product failure analysis. Meredith McQuerry, Ph.D., assistant professor in the Retail Entrepreneurship program in the Jim Moran School of Entrepreneurship serves as the supervisor of the lab and oversees its operation.



Both graduate and undergraduate students gain research and industry laboratory technician experience under the direction and supervision of Dr. McQuerry. Testing services provided by the lab allow for undergraduate and graduate research assistants to pursue independent research projects and gain real world experience in the textile and apparel industry.





In addition to research projects, the Textile Testing Lab performs basic physical-mechanical and chemical textile testing to determine fabric structure, material performance, and product failures. Tests are conducted according to standard test method procedures developed by ASTM, AATCC, ISO, NFPA, and AHAM.

Projects conducted by the lab include the development of a structural firefighter turnout suit prototype with improved safety, mobility, and comfort; a post-use durability assessment of ventilated football uniforms; and the evaluation of sports performance apparel for agricultural personal protective clothing applications. These research projects are funded by private industry partners and federal organizations.

Specific textile testing capabilities include:

FABRIC STRUCTURE ANALYSIS

- Microscopic Evaluation
- Yarn Twist
- Fabric Count
- Weave Identification

PHYSICAL PROPERTIES

- Fiber Content Identification
- Fabric Thickness
- Fabric Weight

PERFORMANCE CHARACTERISTICS

- Dimensional Change
- Smoothness AppearanceColorfastness to Crocking
- Colorfastness to Perspiration
- Colorfastness to Ferspiration
 Colorfastness to Laundering
- Soil Release

Additional tests are available upon request.

PRODUCT ANALYSIS

- Quantitative Color Measurement
- Whiteness Index
- Surface Abrasion (Pilling)
- Stain Identification and Removal
- Water Absorbency and Repellency
- Wrinkle Recovery
- Seam Smoothness
- Gray Scale Evaluation

To request a test or find out more about the lab, please contact:

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WHEN SUBMITTING

Apparel:

Send one (1) garment to be reserved as a control and one (1) garment for each laundering process to be tested.

Fabric:

One (1) yard or meter of fabric is sufficient for most test procedures.



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