



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ARCWEAR<sup>1</sup>  
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MECHANICAL

Valid To: March 31, 2020

Certificate Number: 3570.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on Textile Materials:

<u>Test</u>	<u>Test Method</u> <sup>1</sup>
Dimensional Changes of Laundering	AATCC 135
Domestic Washing & Drying Procedures for Textile Testing	ISO 6330 – Textiles All Washing Procedures for Machine Type A; Drying Procedures A, B, C, D and F; IEC 61482-2 (Section 5.1.2), Edition 1.0, 2009-04
Mass per Unit of Fabric – Option C	ASTM D3776 Option C
Bursting Strength of Textile Fabrics – Diaphragm	ASTM D3786
Tearing Strength of Fabrics – Pendulum Apparatus (Elmendorf – Type)	ASTM D1424
Flame Resistance of Textiles (Vertical Test)	ASTM D6413
Breaking Strength and Elongation (Grab Test) Breaking Strength Only	ASTM D5034
Colorfastness to Laundering	AATCC61 Method 2A, 3A
Trapezoidal Tear Strength	ASTM D5587; ASTM D5733 – 99 (Withdrawn 2008) <sup>2</sup>
Seam Breaking Strength	ASTM D1683
Heat & Thermal Shrinkage	ASTM F2894

<b><u>Test</u></b>	<b><u>Test Method</u></b> <sup>1</sup>
Thread Melt	FTMS 191A Method 1534; ASTM D7138
Cut Resistance	ASTM F2992; ISO 13997
Puncture Resistance	BS: EN 388 Section 6.4
Design	ANSI 107 Section 6
Criteria for Optional Features and Testing	ANSI 107 Section 7
Heat Resistance	CGSB 155.20 Section 7.4
Thermal Shrinkage	CGSB 155.20 Section 7.4
Product Label Requirements	NFPA 2112 Section 5.1
Design Requirements	NFPA 2112 Section 6
Protective Glove Flame Resistance Test	NFPA 2112 Section 8.8
Label Print Durability Test	NFPA 2112 Section 8.7
Flame Impingement	ASTM F1358-08
Hood Materials Test Methods	ASTM F2178 sec 17.4, (except F1506 sec. 8)
Taber Abrasion	ASTM D3389; ASTM D3384

<sup>1</sup> The laboratory is only accredited for the test methods listed above. The accredited test methods are used in determining compliance with the documents (material specifications, guides, practices, conversion tables) listed below. The inclusion of these documents on this Scope does not confer laboratory accreditation to them nor does it confer accreditation for the method(s) embedded within them.

<b><u>NFPA 2112</u></b>	<b><u>NFPA 2112 Referenced Test Method</u></b>	<b><u>Test Section and Requirements in NFPA 2112</u></b>
Flame Resistance of Textiles (Vertical Test) Section 8.3	ASTM D6413; AATCC 135	Section 8.3
Heat & Thermal Shrinkage	NFPA 2112 Section 8.4; ASTM F2894	NFPA 2112 Section 8.4
Washing & Drying per NFPA 2112	NFPA 2112 Section 8.1.3	NFPA 2112 Section 8.1.3
Thread Melt	ASTM D7138 Method B	NFPA 2112 Section 8.6
Product Label Requirements	NFPA 2112 Section 5.1	NFPA 2112 Section 5.1
Design Requirements	NFPA 2112 Section 6	NFPA 2112 Section 6



**NFPA 1975**

Flame Resistance of Textiles  
Heat and Thermal Shrinkage Resistance  
Thermal Stability Test  
Seam Breaking Strength Test  
Thread Heat Resistance Test  
Label Print Durability Test

**NFPA 1975 Referenced  
Test Method**

ASTM D6413  
ASTM F2894  
ASTM F2894  
ASTM D1683  
NFPA 1975 Section 8.7  
NFPA 1975 Section 8.5

**Test Section and  
Requirements in  
NFPA 1975**

NFPA 1975 Section 8.6  
NFPA 1975 Section 8.3  
NFPA 1975 Section 8.3  
NFPA 1975 Section 8.4  
NFPA 1975 Section 8.7  
NFPA 1975 Section 8.5

**NFPA 1977 Standard on Protective Clothing and  
Equipment for Wildland Firefighting**

NFPA 1977 Laundry Preconditioning  
Flame Resistance of Textiles (Vertical Test)  
Heat and Thermal Shrinkage Resistance Test  
Tear Resistance Test  
Cleaning Shrinkage Resistance Test  
Seam Breaking Strength Test  
Label Legibility Test 1-Laundering,  
Heat Durability  
Thread Melt

**NFPA 1977 Referenced  
Test Method**

AATCC 135  
ASTM D6413  
NFPA 1977 Section 8.4  
ASTM D1424  
AATCC 135  
ASTM D1683  
NFPA 1977 Section  
8.31.4.1  
NFPA 1977 Section 8.9

**Test Section and  
Requirements in  
NFPA 1977**

NFPA 1977 Section 8.1.2  
NFPA 1977 Section 8.3  
NFPA 1977 Section 8.4  
NFPA 1977 Section 8.6  
NFPA 1977 Section 8.7  
NFPA 1977 Section 8.8  
NFPA 1977 Section 8.31.4.1  
NFPA 1977 Section 8.9

**ASTM F1506 Standard Performance Specification  
for Flame Resistant and Electric Arc Rated  
Protective Clothing Worn by Workers Exposed to  
Flames and Electric Arcs**

Flame Resistance of Textiles (Vertical Test) Sections  
7.6, 7.6.1, 7.6.1.1, 7.6.1.2  
  
Bursting Strength of Textiles Fabrics – Diaphragm  
Section 7.3  
  
Breaking Strength and Elongation  
(Grab Test) Breaking Strength Only (elongation is  
optional in this method) Section 7.1  
  
Tearing Strength of Fabrics – Pendulum Apparatus  
(Elemendorf – Type) Section 7.2  
  
Colorfastness to Laundering Section 7.4.1  
  
Dimensional Change Section 7.5

**ASTM F1506  
Referenced Test Method**

ASTM D6413;  
AATCC 135  
  
ASTM D3786  
  
ASTM D5034  
  
ASTM D1424  
  
AATCC 61  
  
AATCC 135

**ASTM F1506 Requirements**

Initial Flammability, After 25  
Washes;  
Flammability Requirements  
in Tables 1, 2 and 3  
  
Bursting Strength  
Requirements in Table 1  
  
Breaking Strength  
Requirements in Table 1  
  
Tear Resistance  
Requirements in Table 1  
  
Colorfastness to Laundering  
Requirements in Tables 1  
and 2  
  
Dimensional Change  
Requirements in Tables 1, 2.3



<b><u>ASTM F1891-12 Standard Specification for Arc and Flame-Resistant Rainwear</u></b>	<b><u>ASTM F1891 Referenced Test Method</u></b>	<b><u>Test Section and Requirements in ASTM F1891</u></b>
Flame Resistance of Textiles (Vertical Test) Section 9.2	ASTM D6413; AATCC 135	Section 9.2
Fabric Weight	ASTM D3776 Option C	Section 7.1.2
Trapezoidal Tear Resistance	ASTM D1117	Section 7.4
<b><u>ANSI/ISEA 107-2015 American National Standard for High-Visibility Public Safety Vests</u></b>	<b><u>ANSI/ISEA 107-2015 Referenced Test Method</u></b>	<b><u>Test Section and Requirements in ANSI/ISEA 107-2015</u></b>
Design	ANSI 107 Section 6	Section 6
Criteria for Optional Features and Testing	ANSI 107 Section 7	Section 7
Dimensional Change of Background Material	AATCC 135-2012	Section 8.3
Tear Resistance of Woven Materials (Uncoated, Coated or Laminate)	ASTM D1424-09 (2013)	Section 8.4.2
Care Labeling	ANSI 107 Section 11	Section 11
Marking	ANSI 107 Section 12	Section 12
Instructions for Use	ANSI 107 Section 13	Section 13
<b><u>ANSI/ISEA 105-2016 American National Standard for Hand Protection Classification Section</u></b>	<b><u>ANSI/ISEA 105-2016 Referenced Test Method</u></b>	<b><u>Test Section and Requirements in ANSI/ISEA 105-2016</u></b>
Cut Resistance	ASTM F2992	Section 5.1.1
Puncture Resistance	BS:EN 388 Section 6.4	Section 5.1.2
<b><u>CGSB 155.20 Workwear for protection against hydrocarbon flash fire and optionally steam and hot fluids</u></b>	<b><u>CGSB 155.20 Referenced Test Method</u></b>	<b><u>Test Section and Requirements in CGSB 155.20</u></b>
Flame Resistance	ASTM D6413	Section 7.2
Heat Resistance	CGSB 155.20	Section 7.4
Thermal Shrinkage	CGSB 155.20	Section 7.4
Melting Point	ASTM D7138; FedStd 191A, 1534	Section 7.5

<sup>2</sup> NOTE: This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.





## *Accredited Laboratory*

A2LA has accredited

**ARCWEAR**

*Louisville, KY*

for technical competence in the field of

**Mechanical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. 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*).



Presented this 9<sup>th</sup> day of May 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 3570.01  
Valid to March 31, 2020

*For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*