

January 18, 2022

#### TO MANUFACTURERS OF NFPA PROTECTIVE CLOTHING AND EQUIPMENT:

2022 Edition of NFPA 1977

This Bulletin is in regard to the impending adoption by SEI of the 2022 Edition of NFPA 1977, Standard on Protective Clothing and Equipment for Wildland Fire Fighting and Urban Interface Fire Fighting, for the SEI Certification Programs covering NFPA Protective Clothing and Equipment. The NFPA Standards Council issued this new standard on March 18, 2021, with an effective date of April 8, 2021.

#### I. Transition to the 2022 Edition of NFPA 1977 Standard

In accordance with Paragraph 4.1.8 of the 2022 Edition of NFPA 1977, SEI has ceased to issue certifications for any <u>new</u> products to the 2016 Edition of NFPA 1977. As a result, effective immediately, SEI will only test and certify products to the 2022 Edition of NFPA 1977.

Additionally, in accordance with Paragraphs 4.1.9 and 4.1.10 of the 2022 Edition of NFPA 1977, manufacturers may deplete their inventories of protective clothing and equipment (labeled to the 2016 Edition of NFPA 1977) until April 8, 2022. On April 8, 2022, manufacturers shall remove all certification labels and product labels indicating compliance with the 2016 Edition of NFPA 1977 from all items that are under the manufacturer's control. SEI will review and confirm this action during subsequent quality assurance audit(s), and it will be so noted in the quality audit report(s). Please note there is a Tentative Interim Ammendment (TIA) currently under review at NFPA to extend the relabeling date by six months, with final action on the TIA expected the beginning of April 2022 by the NFPA Standards Council.

#### II. Brief Summary of the 2022 Edition of NFPA 1977 Standard

The 2022 Edition of NFPA 1977 includes the following changes:

- 1. Incorporates within its scope the design requirements of urban interface fire fighting protective clothing
- 2. Added personal protective fire shelter design and testing
- 3. Adjustments to work glove sizing that reflect NFPA 1999 work glove requirements
- 4. Test methods for garment material composites have been added
- 5. Updated to the table on minimum sizing requirements for protective lower torso garments for females
- 6. Added a fabric breaking strength test for protective face/neck shroud

Copies of the new standard can be obtained directly from the NFPA through the NFPA website (www.nfpa.org).





#### III. Testing Laboratory Fees for the 2022 Edition of NFPA 1977

SEI's contract test laboratory for NFPA Protective Clothing and Equipment testing (Intertek) has provided the test fees for the 2022 Edition of NFPA 1977. The Testing Laboratory Fee Schedule for Protective Garments is provided as Attachment A to this Bulletin. The Testing Laboratory Fee Schedule for Protective Helmets is provided as Attachment B to this Bulletin. The Testing Laboratory Fee Schedule for Protective Work Gloves is provided as Attachment C to this Bulletin. The Testing Fee Schedule for Footwear is provided as Attachment D to this Bulletin. The Testing Fee Schedule for Face/Neck Shrouds is provided as Attachment E to this Bulletin. These new test fees will be effective with any submittals to the 2022 Edition of the NFPA 1977 Standard.

#### IV. Submittal Processing

In order to avoid any lapse(s) in certification as a result of the transition, SEI Participants are strongly encouraged to submit NFPA 1977, 2022 Edition certification submittal request(s) for all of the products that are currently certified by SEI to the 2016 Edition of NFPA 1977 as soon as possible.

All certification submittal request(s) shall 1) be submitted directly to SEI (via email) and 2) include a completed submittal package (i.e., SEI Submittal Form, Components & Materials List, Top-Level Engineering Drawing(s), User Instructions, etc.) for each model of protective clothing and equipment.

Following receipt of the above noted completed submittal package(s), SEI will review each certification submittal package and determine the applicable test program (which will include sample requirement(s) and cost(s)). SEI will then direct manufacturers to forward the required number of samples directly to Intertek at the following address:

Ms. Ann Overbaugh Intertek 3933 US Route 11 Cortland, NY 13045

Phone: (607) 758-6711; email: Ann.Overbaugh@intertek.com

Your assistance in following these procedures will assist SEI, Intertek, and SEI auditors in ensuring an orderly certification process. Thank you for your participation in the SEI Certification Program. Please contact SEI should you have any questions or require additional information.

Sincerely,

**Rob Simmonds** 

Program Manager

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cc: Mr. Andrew Rulison, Intertek

Ms. Ann Overbaugh, Intertek

Mr. Stephen Sanders, SEI

Mr. Ben Hanna, SEI

Mr. Bill Fithian, SEI

# APPENDIX A

		Intertek				
		A 1977-2022				
Garment Requirements Only						
Section Number	Test Name	Product Description	Initial Testing Fees	Annual Testing Fees	Categories of N/C	
5.1	Label Content	Label	\$ 150.00	\$ 100.00	Minor	
5.1.2	User Info	User Guide	\$ 150.00	\$ 100.00	Minor	
6.1	Design Criteria	Finished garment	\$ 250.00	\$ 250.00	Minor	
8.1.2	100 Cycles of Laundering	Fee is per load	\$1,500.00	\$ 1,500.00	N/A	
	Laundering for Particulate Blocking 10 cycles top load	Fee is per load	\$ 300.00	\$ 300.00	N/A	
7.1.2 & 7.1.2.1	RPP  Flame resistance (Garment textile fabrics; collar linings, winter liners, trim, lettering, labels, linings, padding, reinforcements, bindings, hanger loops, emblems & patches; excluding hook and pile fasteners, elastic & interlinings where not in direct contact with the skin; each layer tested separately)	Garment Material  Garment Material	\$ 660.00	\$ 600.00	Critical  Critical	
7.1.3	Heat and thermal shrinkage test (Garment textile fabrics and interlinings, winter liners, collar linings)	Garment Material	\$ 350.00	\$ 300.00	Critical	
7.1.4	Heat and thermal shrinkage test (Garment textile fabrics and interlining, winter liners, trim, lettering, padding, reinforcements, labels, wristlets, collars, closures, fasteners, bindings, hanger loops, emblems, and patches, but excluding hook & pile fasteners & elastic where not in direct contact with the skin)	Garment Material	\$ 250.00	\$ 200.00	Critical	
7.1.5	Heat & Thermal Shrinkage (see above)	Garment Material	\$ 250.00	\$ 200.00	Critical	
7.1.6	Total Heat Loss (Garment Composite)	Composite (12"x12")	\$1,160.00	\$ 500.00	Critical	
7.1.6.1	Total Heat Loss (Reinforcement Material)	Composite (12"x12")	\$1,160.00	\$ 500.00	Critical	
7.1.7	Tear resistance (Woven garment textile fabrics, collar linings & winter liners)	Garment Material	\$ 275.00	\$ 140.00	Major B	
7.1.7.1	Burst strength test (Knit garment textile fabrics, collar linings, & cold weather linings)	NA	\$ 165.00	\$ 140.00	Major B	
7.1.8	Cleaning shrinkage resistance (Garment textile fabrics, collar linings, and winter liners)	1 yard of material	\$ 275.00	\$ 200.00	Minor	
7.1.9	Seam strength	All garment seam assemblies	\$ 165.00	\$ 140.00	Major B	
7.1.10	Thread Melting Temperature	All sewing threads used in garment construction	\$ 350.00	\$ 350.00	Major A	
7.1.11	Thread Breaking Strength	All sewing threads used in garment construction	\$ 215.00	\$ 215.00	Major A	
7.1.12	Label Durability	Garment product labels	\$ 375.00	\$ 375.00	Major B	
7.1.13	Breaking Strength	Fastener Tape	\$ 300.00	\$ 300.00	Minor	
7.1.14	Shear Strength	Fastener Tape	\$ 300.00	\$ 300.00	Minor	
7.1.15	Peel Strength	Fastener Tape	\$ 300.00	\$ 300.00	Minor	
7.1.16	Crosswise Breaking Strength of Chain	Zippers	\$ 200.00	\$ 150.00	Major B	
7.1.16	Breaking Strength of Separating Unit	Zippers	\$ 200.00	\$ 150.00	Major B	
7.1.16	Holding Strengths of Stops, Retainers, & Separating Units	Zippers	\$ 200.00	\$ 150.00	Major B	
7.1.16	Operating Force	Zippers	\$ 200.00	\$ 150.00	Major B	
7.1.17	Breaking Strength	Garment Material	\$ 165.00	\$ 140.00	Major A	
7.1.18	Particulate Blocking (Optional)	Garment Material or Composites	\$7,000	\$ 3,000.00	Critical	
7.1.19	Tensile Strength	Garment Material	\$ 165.00	\$ 140.00	Major A	
Total Testin		•	\$17,380	\$11,240	<u> </u>	

# APPENDIX B

Intertek							
NFPA 1977-2022							
	Helmet Requirements Only						
Section Number	Test Name	Product Description	Initial Testing Fees	Annual Testing Fees	Categories of N/C		
5.2	Label Content	Label	\$ 150.00	\$ 100.00	Minor		
5.2.2	User Info	User Guide	\$ 150.00	\$ 100.00	Minor		
6.2	Design Criteria	Helmets	\$ 500.00	\$ 500.00	Minor		
7.2.1	Thread Melting Temperature	Thread	\$ 350.00	\$ 350.00	Major A		
7.2.2	Thread Breaking Strength	Thread	\$ 250.00	\$ 200.00	Major A		
7.2.3	Top Impact Resistance	Helmets	\$ 450.00	\$ 400.00	Critical		
7.2.4	Penetration Resistance	Helmets	\$ 450.00	\$ 400.00	Critical		
7.2.5	Antiglare Flame Resistance	Helmets	\$ 200.00	\$ 150.00	Major A		
7.2.6	Heat and Thermal Shrinkage Resistance	Helmets	\$ 400.00	\$ 300.00	Major A		
7.2.7	Suspension System Retention	Helmets	\$ 375.00	\$ 250.00	Major A		
7.2.8	Retroreflectivity & Fluorescence	Trim	\$ 850.00	\$ 800.00	Major B		
7.2.9	Retention System	Helmets	\$ 375.00	\$ 250.00	Major B		
7.2.10	Google or headlamp clip attachment strength	Helmets	\$ 200.00	\$ 130.00	Major B		
7.2.11	Label Legibility	Helmets	\$ 175.00	\$ 130.00	Minor		
Total Testi	ng Fees		\$4,875	\$4,060			

# APPENDIX C

Intertek						
NFPA 1977-2022  Glove Requirements Only						
5.3	Label Content	Glove Label	\$ 100.00	\$ 50.00	Minor	
5.3.2	User Info	User Guide	\$ 100.00	\$ 50.00	Minor	
6.3	Design Criteria	Gloves, each size	\$ 250.00	\$ 250.00	Minor	
7.3.1	Heat & Thermal Shrinkage	Whole gloves	\$ 250.00	\$ 150.00	Critical	
	Flame Resistance		\$ 350.00	\$ 275.00	Critical	
722		Glove Materials	\$ 350.00	\$ 275.00	Critical	
7.3.2		Glove Materials	\$ 350.00	\$ 275.00	Critical	
			\$ 350.00	\$ 275.00	Critical	
7.3.3	Conductive Heat Resistance	Glove Body (Palm)	\$1,250.00	\$ 750.00	Critical	
7.3.4	Thermal Protective Performance	Glove Body	\$ 450.00	\$ 250.00	Critical	
7.3.5	Cut Resistance	Glove Body	\$ 225.00	\$ 200.00	Major A	
7.3.6	Puncture Resistance	Glove Body	\$ 350.00	\$ 300.00	Major A	
7.3.7	Dexterity	Whole Gloves	\$ 750.00	\$ 550.00	Major B	
7.3.8	Grip	Whole Gloves	\$ 375.00	\$ 300.00	Major B	
7.3.9	Label Durability and Legibility	Labels	\$ 250.00	\$ 250.00	Major B	
7.3.10	Thread Melting Temperature	Thread	\$ 350.00	\$ 350.00	Major A	
7.3.11	Thread Breaking Strength	Thread	\$ 250.00	\$ 200.00	Major A	
7.3.12	Torque	Whole gloves	\$ 375.00	\$ 300.00	Major B	
Total Testir	Total Testing Fees			\$5,050		

# APPENDIX D

Intertek						
	NFPA 1977-2022					
Footwear Requirements Only						
Section			Initial	Annual	Categories of	
Number	Test Name	Product Description	Testing Fees	Testing Fees	N/C	
6.4	Design Criteria	Whole Boot	\$525	\$525	Critical	
7.4.1	Heat Resistance	Whole Boot	\$190	\$150	Critical	
7.4.2	Hardware Corrosion Resistance	Each Hardware	\$190	\$150	Major B	
7.4.3	Cut Resistance Test	Footwear Upper	\$290	\$230	Major A	
7.4.4	Puncture Resistance Test	Footwear Upper	\$190	\$150	Major A	
7.4.5	Sole/Heel Abrasion (excluding caulked boots)	Footwear Sole	\$420	\$210	Major A	
7.4.6	Conductive Heat Resistance	Whole Boot	\$460	\$290	Major A	
7.4.7	Slip Resistance	Whole Boot	\$525	\$260	Major A	
7.4.8	Attachment for Eyelets and Stud Hooks	Whole Boot	\$190	\$150	Major B	
7.4.9	Flame Resistance	Whole Boot	\$525	\$420	Critical	
7.4.10	Label Durability / Legibility	Footwear Label	\$250	\$260	Major B	
7.4.11	Thread Melting Test	Footwear Thread	\$170	\$135	Major A	
7.4.12	Thread Breaking Strength Test	Footwear Thread (need TEX # normally >90)	\$225	\$210	Major A	
Total Testin	Total Testing Fees			\$3,140		

# APPENDIX E

	NFF	Intertek PA 1977-2022			
Face/Neck Shroud Requirements Only					
Section Number	Test Name	Product Description	Initial Testing Fees	Annual Testing Fees	Categories of N/C
5.5.1	Label Content	Label	\$ 150.00	\$ 100.00	Minor
5.5.2	User Info	User Guide	\$ 150.00	\$ 100.00	Minor
6.5	Design Criteria	Face/Neck Shroud	\$ 150.00	\$ 150.00	Minor
8.1.2	100 Cycles of laundering	Face/Neck Shroud	\$1,500	\$ 1,500.00	
7.5.1	Radiant Protective Performance (RPP)	Face/Neck shroud composite	\$ 660.00	\$ 600.00	Major A
7.5.2	Flame Resistance	Face/Neck shroud individual fabrics	\$ 350.00	\$ 350.00	Major A
7.5.3	Heat and Thermal Shrinkage Resistance	Face/Neck shroud individual fabrics	\$ 350.00	\$ 300.00	Critical
7.5.4	Heat and Thermal Shrinkage Resistance	Face/Neck shroud individual fabrics other fabrics and fasteners	\$ 250.00	\$ 200.00	Critical
7.5.5	Heat and Thermal Shrinkage Resistance	Face/Neck shroud Hardware	\$ 250.00	\$ 200.00	Major A
7.5.6	Tear Resistance	Face/Neck shroud individual fabrics	\$ 275.00	\$ 140.00	Majoir A
7.5.6.1	Burst Strength	Face/Neck shroud knit materials	\$ 275.00	\$ 140.00	Major A
7.5.7	Cleaning Shrinkage	Face/Neck shroud individual fabrics	\$ 275.00	\$ 200.00	Major B
7.5.8	Seam Breaking Strength	Face/Neck shroud	\$ 165.00	\$ 140.00	Major B
7.5.8.1	Seam Breaking Strength	Face/Neck shroud - woven	\$ 165.00	\$ 140.00	Major B
7.5.8.2	Seam Breaking Strength	Face/Neck shroud - woven	\$ 165.00	\$ 140.00	Major B
7.5.9	Thread Heat Resistance	Sewing Thread	\$ 350.00	\$ 350.00	Major B
7.5.10	Thread Breaking Strength	Sewing Thread	\$ 215.00	\$ 215.00	Major B
7.5.11	Label Durability and Legibility	Shroud Labels	\$ 375.00	\$ 375.00	Minor
7.5.12	Breaking Strength A-A-55126B Fastener Tapes, Hook and Loop, Synthetic	Fastener Tape	\$ 300.00	\$ 300.00	Major B
7.5.12.1	Shear Strength A-A-55126B Fastener Tapes, Hook and Loop, Synthetic	Fastener Tape	\$ 300.00	\$ 300.00	Major B
7.5.12.2	Peel Strength A-A-55126B Fastener Tapes, Hook and Loop, Synthetic	Fastener Tape	\$ 300.00	\$ 300.00	Major B
7.5.13	Zipper Stregth	Zippers	\$ 200.00	\$ 150.00	Major B
7.5.14	Breaking Strength	Face/Neck shroud individual fabrics	\$ 165.00	\$ 140.00	Major B
<b>Total Testir</b>	ng Fees		\$7,335	\$6,530	